

THE MILLING WORLD

AND

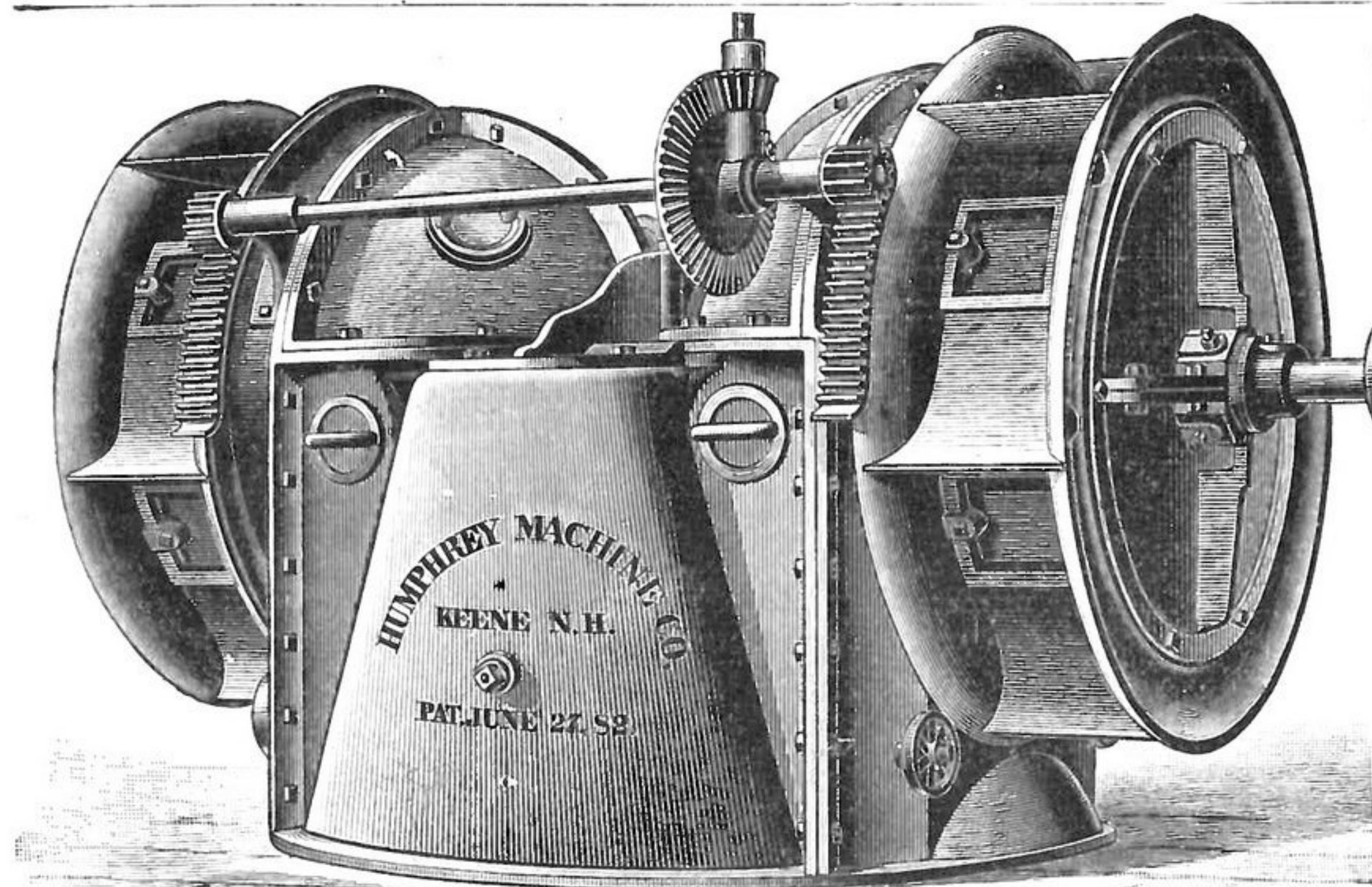
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XXII. No. 22.

BUFFALO, N. Y., JULY 28, 1890.

\$1.50 PER YEAR.

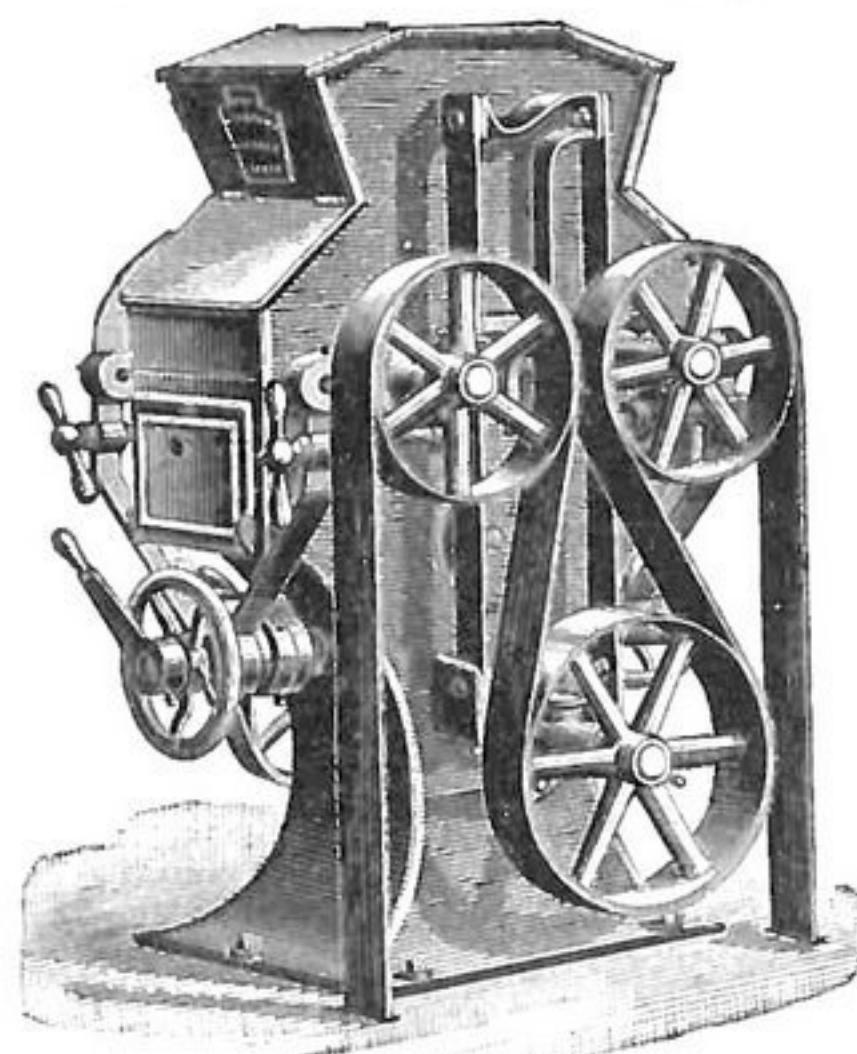


THE X-L-G-R ^{OR} IMPROVED CIRCUMSHOT Water Wheel

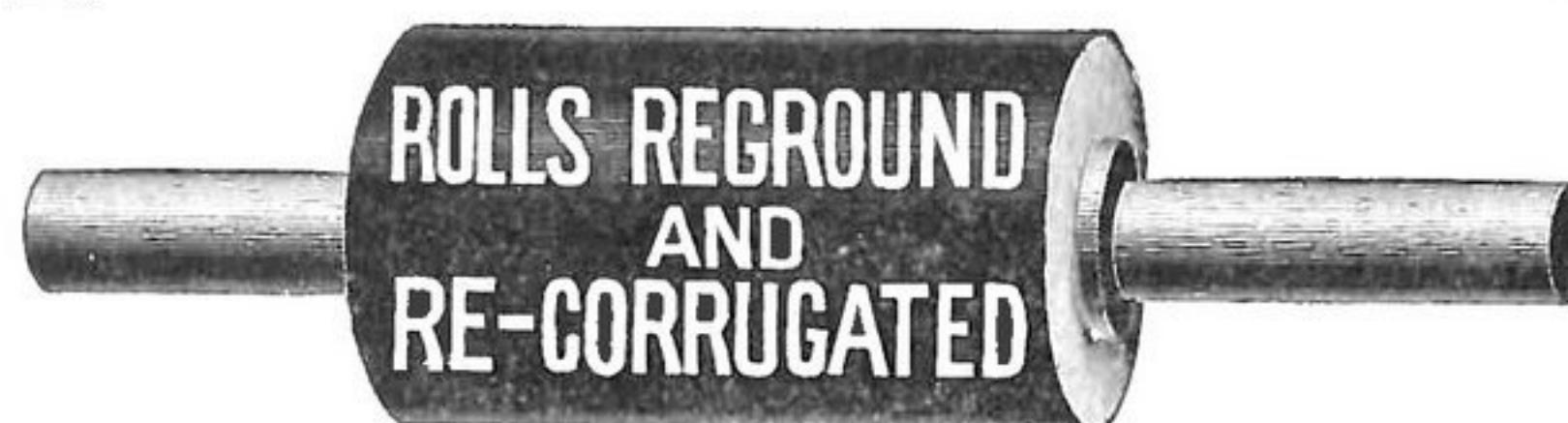
On Horizontal Shaft. Saves cost, annoyance and loss of power incident to use of gears. Affords more available power from water applied at full or part gate than any other. The cheapest, best and most desirable Water Wheel yet produced.

EFFICIENCY, ECONOMY and EXCELLENCE FULLY GUARANTEED.

Humphrey Machine Co.
KEENE, - - N. H.



Flour Mills. Corn Mills. Hominy Mills. Unparalleled Results.



ROLLS REGROUND
AND
RE-CORRUGATED



By the "Keystone" Roll Grinder, Manufactured by Ourselves. The only machine that will Grind Rolls Absolutely True.

"KEystone" 4-ROLLER MILL.

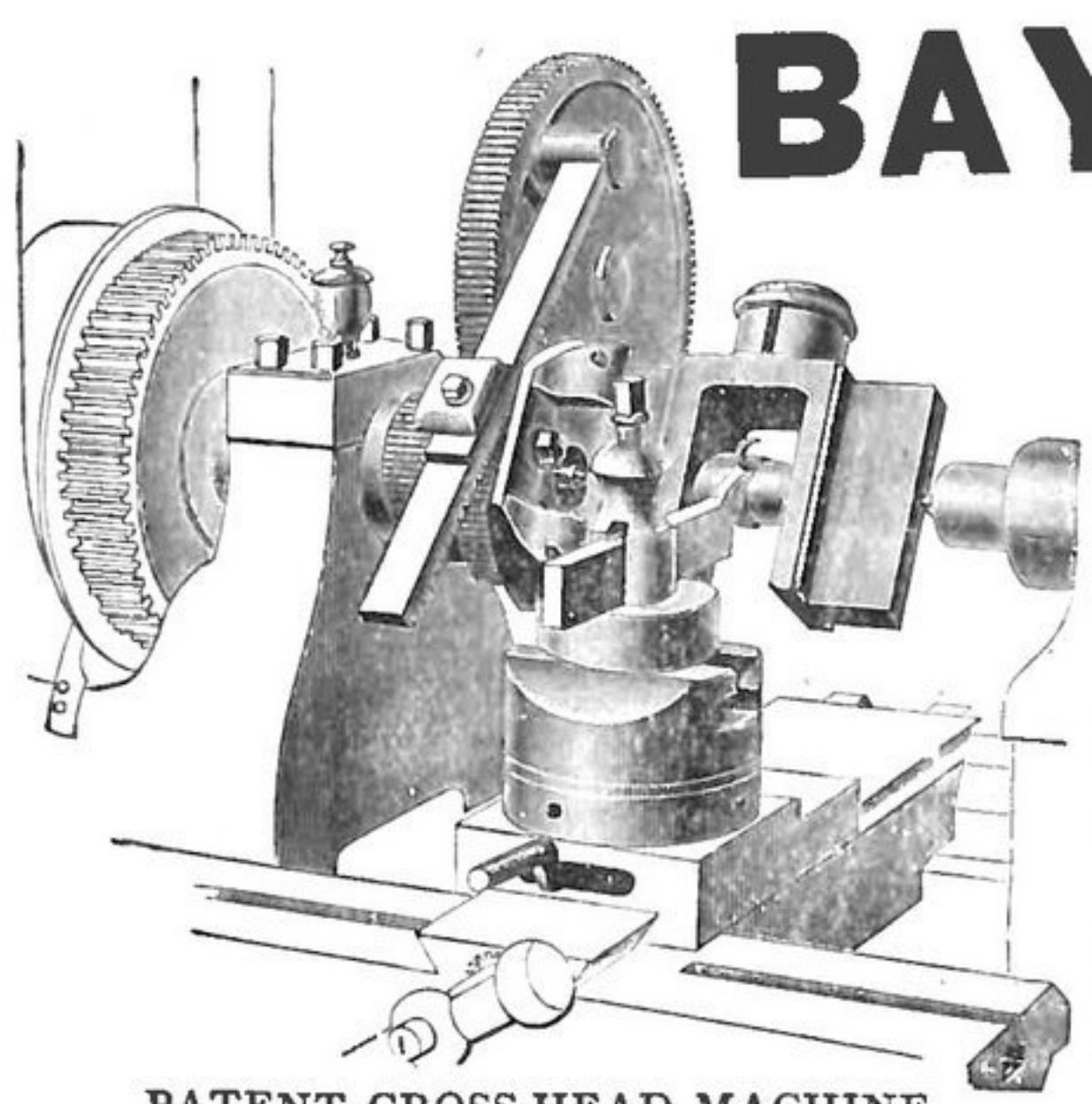
ADDRESS THE J. B. ALLFREE CO., 76 to 78 Shelby Street, INDIANAPOLIS, IND.

BAY STATE IRON WORKS

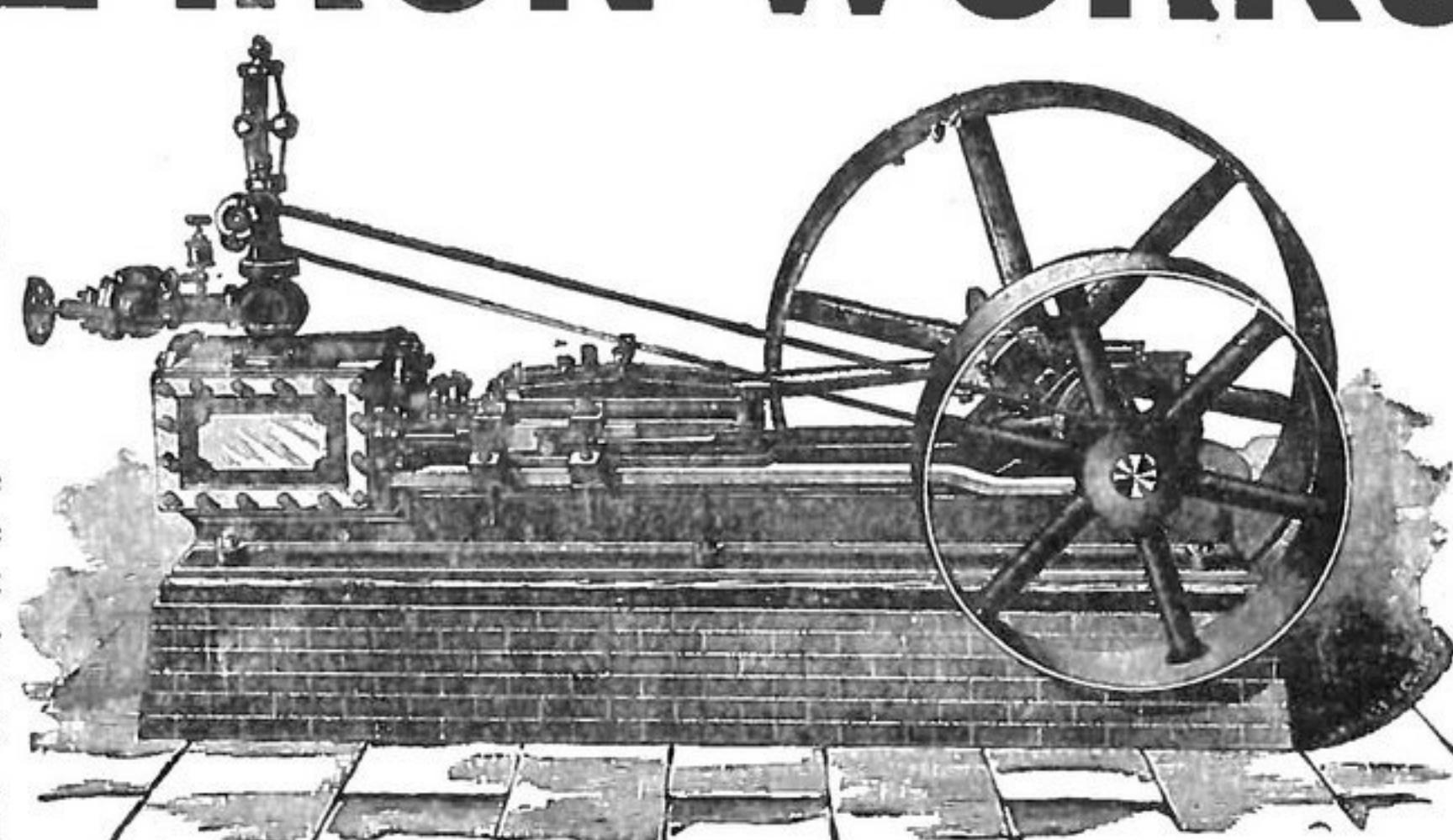
Manufacturers of

Engines, Boilers,
AND
HOISTING MACHINES.

Also the Patent Cross-Head Machine and Acme Cube Pipe Tongs. We make either Center or Side Crank Engines, on same bed. Make engines from 5 to 250 Horse-Power. Have over 3,500 Engines and Boilers and over 1,000 Hoisting Machines in use, and all giving good satisfaction. Send for Catalogues and Prices.



PATENT CROSS-HEAD MACHINE.



IMPROVED DETACHABLE CENTER-CRANK ENGINE.

Noble & Hall, Box 462, Erie, Pa.

OFFICE OF
CASE MANUFACTURING COMP'Y
COLUMBUS, OHIO.

The Case Roller Mills. Over 14,000 Pairs in Use.

PLEASE READ OUR DESCRIPTION OF THEM, EVERY STATEMENT OF WHICH IS ABSOLUTELY TRUE.

PLEASE READ WHAT MILL OWNERS SAY ABOUT THEM.



The accompanying cut is a correct illustration of our latest improved Four Roller Mill. For fine work, great durability, simplicity, and general excellence, they stand "head and shoulders" above all others.

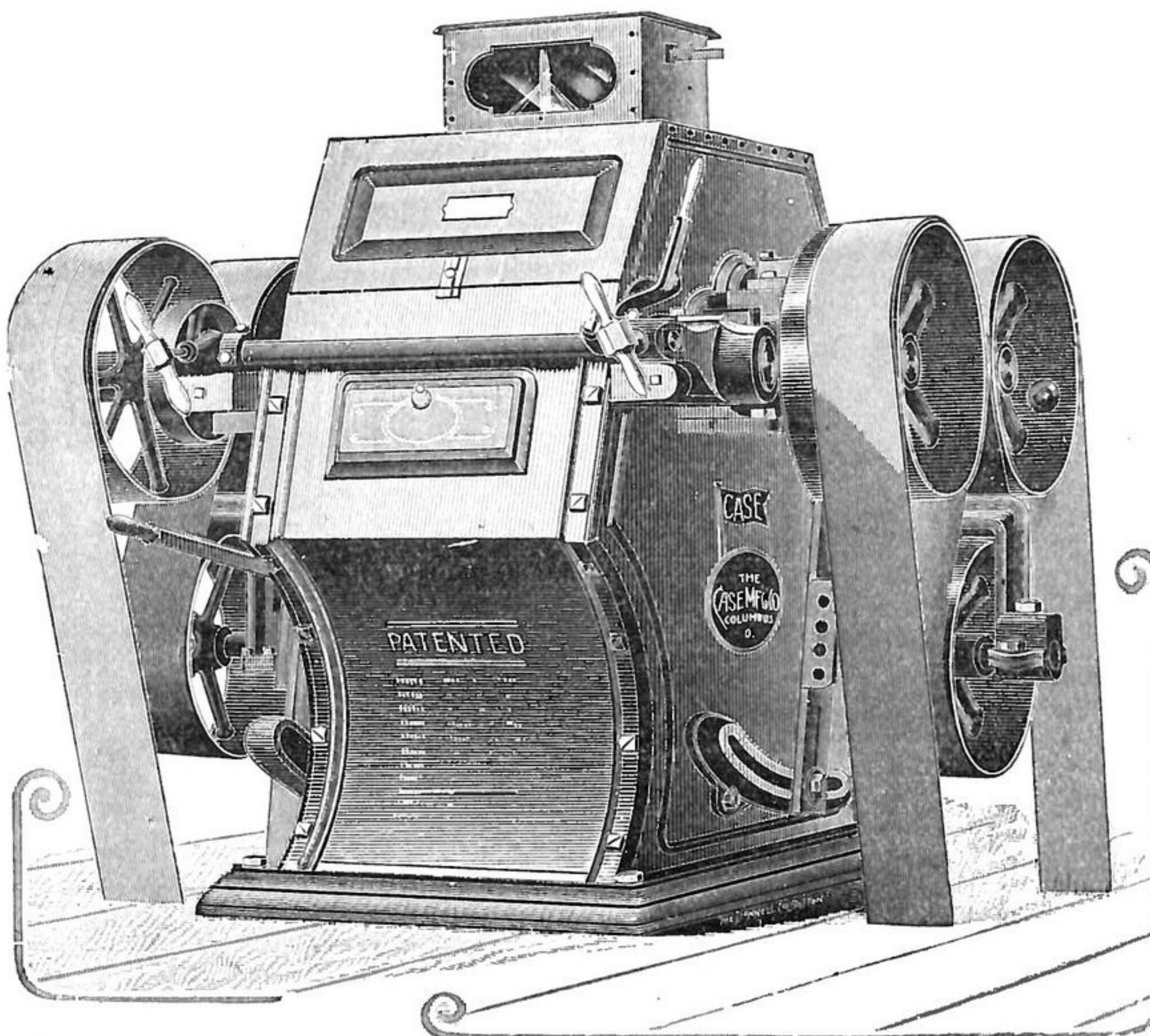
The frame is of iron with a heavy iron base.

The wood-work in top is of select cherry and black walnut, carefully shellacked and varnished.

The handles of adjusting screws and levers are finely nickel plated.

The joints are tight and dustless.

The adjustments easy, simple and perfect.



The roll bearings are wide and finely babbitted.

The belt drive is positive—no little short belts to slip.

The door for examining stock is a great convenience.

The arrangement for leveling rolls, simple and accurate.

The rolls can be thrown apart their entire length by one movement of the lever, and brought back again to original position, requiring no re-setting or experimenting.

Each machine is provided with our AUTOMATIC VIBRATING FEED, which requires no attention, and never fails to spread the feed the entire length of the rolls.



Please Read These Testimonials.

LITCHFIELD MILLING CO., MANUFACTURERS OF FLOUR. }
 LITCHFIELD, ILL., Sept. 14, 1889. }

Case Manufacturing Co., Columbus, Ohio.

GENTLEMEN: We are in receipt of your favor of the 11th inst., and in reply would say we have twenty CASE AUTOMATIC FEEDS on our Dawson and Allis Rolls, and we are greatly pleased with them. We have tested the Feeds thoroughly on different materials, and find they work as well on bran and germ and other soft materials, as they do on middlings. We have derived great benefit from the use of them, and can cheerfully recommend them to the milling fraternity.

Yours truly,
 J. C. EDWARDS, General Manager.

OFFICE OF A. J. MILLER, PROPRIETOR WHITE ROSE MILLS.
 DEALER IN FLOUR, GRAIN AND MILL FEED.
 METAMORA, IND., Nov. 19, 1889.

Case Manufacturing Co., Columbus, Ohio.

GENTLEMEN: Your Feed arrived O. K., and placed it in working order in a very short time. You have furnished me a daisy Feed. After regulating your Feed, it needs no more attention. It pays for itself in one week over the "Roller Feed" in cleaning up the

stock, and also insuring the superiority at same time. I forward you the amount of bill.

Yours truly, A. J. MILLER.

TREZEVANT, TENN., Feb. 27, 1889.

The Case Manufacturing Co.

GENTLEMEN: We have five double stands of Rolls with Roller Feeds on all of them. A short time ago one of your agents induced us to try one of your Automatic Shaker Feeds. We find that it works much better than the Roll Feed, distributing the material the whole length of the Roll. We heartily recommend your feeds to any one wishing to put in new machinery.

Respectfully yours, FUQUA, HARRIS & Co.

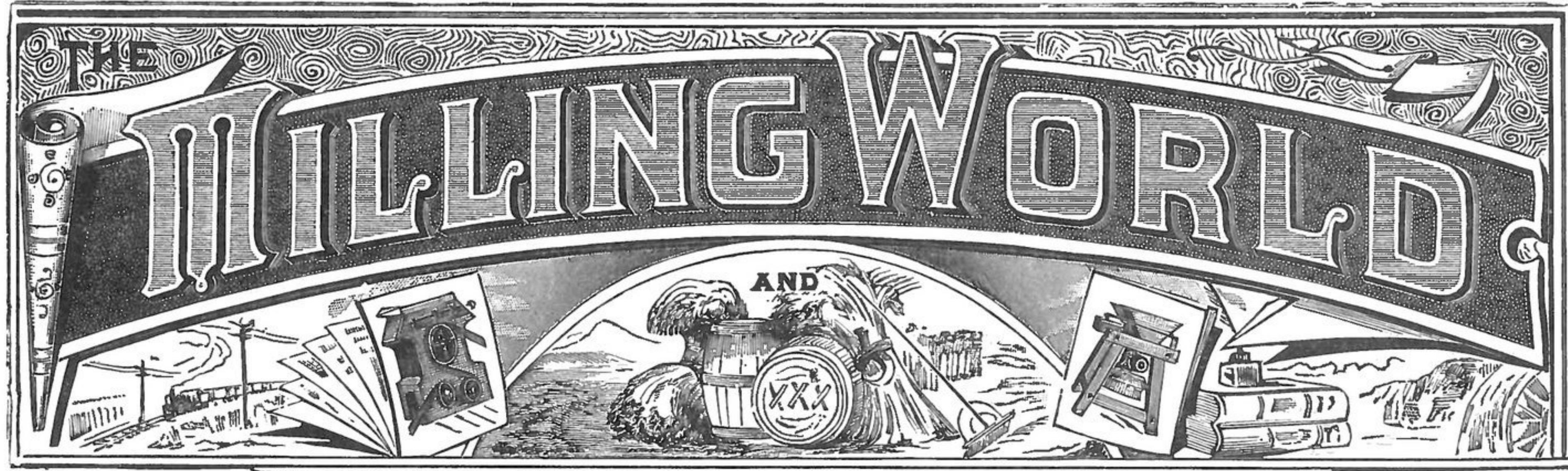
W. C. MANSEFIELD & Co., MERCHANT MILLERS. }
 CLEVELAND, TENN., Aug. 29, 1889. }

Case Mfg. Co., Columbus, O.

GENTLEMEN: If we were to build a hundred mills, we would not permit any other than the "CASE ROLL" to enter them. They are the best roll on earth.

Yours truly,

W. C. MANSFIELD & Co.



CHRONICLE OF THE GRAIN AND FLOUR TRADE

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INDIVIDUAL shippers, without cabalistic "units" showing anywhere upon their persons, are forcing transportation companies to give them the facilities requisite for business. The National with all its "1,412 units" is still unable to force recognition from a single company. Moral: Let the National go to pieces, and let the "units" go it alone. In disunion there is strength, in this case at least.

MILLERS and everybody else will agree with Secretary Blaine that South and Central American countries should give as well as take, in commerce with the United States. Brazil, in particular, has found her best market in the United States, where most of her products are admitted free of duty, and it is only fair that she should "retaliate" in the case of American breadstuffs. Secretary Blaine is on the right track, and the millers should assist him in every possible way in impressing upon Congress the necessity of doing something to readjust the present absolutely inequitable relations of the two Republics.

ARE the "big" millers of the United States pursuing a wholly sane course in placing so much stress on their export trade, and so little on the home business? When the inevitable end of the export business comes, these "big" concerns will have to throw their energies into the work of capturing the home trade. They will then find themselves confronted by many thousands of "small mills" that have been running for home trade exclusively, whose owners will know that trade thoroughly, and know just what it needs. Would it not be prudent for the "big" fellows, the syndicates, to keep in touch with the domestic trade to a certain extent?

CROP writing calls out wonderful displays of fine rhetoric. Prime, Prognosticator, states in one sentence that the ground is "absorbing the rain," and in another that the heat is causing the ground to dry out. These statements of these important facts are eclipsed by a sentence in the St. Paul "Pioneer Press," which reads: "The hot winds on Thursday and Friday threatened great injury but the rains of to-day nearly or quite repaired the damage." Repairing a "threatened" injury is good! The same journal sapiently remarks; "With favorable weather harvest will set in from a week to ten days earlier than usual." What's to hinder an early harvest when the weather is favorable? The Chicago "Inter-Ocean" tries its 'prentice hand at slugging the proprieties, and this is the way it succeeds in a Minnesota dispatch: "Never before in the history of this section has rain fallen so freely and providentially during the dry periods." Of course there may be a "dry season" when abnormal quantities of rain are falling daily!

ONE or two of our contemporaries appear to be somewhat affected by the "units" in the membership of the National Association. The cabalistic "1,412 units" read big and impress the unreasoning, and that is just what the managers of the National intend when they use the "unit" racket. It is a case of hoodooing, and the only wonder is that any intelligent journalist could be hoodooed into a reverential

frame of mind toward the old skeleton by the "unit" showing. Suppose there are "1,412 units daily capacity" in the organization. What does that fact mean when boiled down and expressed in men? If each "unit" meant a man, then there would be just 1,412 men in the National. One Minneapolis syndicate casts 240 "units," cutting the total down to 1,212. Several other syndicates control 400 to 600 votes, reducing the total to 600, and even in this balance there are few "units" that mean men. Almost every mill in the organization casts over one vote. It is safe to say that the actual number of actual flour-makers in the actual membership of the Millers' National Association is not over 300. It is doubtful that it can show even that number. Before any of our usually clear-minded contemporaries allow themselves to be hoodooed or hypnotized into awesome reverence for wholly pretended greatness, like that incarnated in the Millers' National Association, they should sit down and cipher out what the mysterious "1,412 units" mean. After they have finished that computation, Minneapolis hypnotism will not affect them injuriously.

SHOULD the Millers' National Association continue to advance at its past and present rate of retrogression for twenty years, it will accomplish for the export flour trade what it is trying to accomplish just when the export trade is wiped out by the natural and inevitable growth of the home trade. The experts, not crop experts this time, but experts in economics and statistics, assert that the growth of population, that is, the excess of births over deaths, is at the rate of nearly two per cent. a year. As the population of the United States is about 65,000,000, it follows that the growth will amount to about 1,300,000 a year, while immigration will doubtless add an average of 300,000 a year, making the gain 1,600,000 a year. Allowing four bushels of grain per head per year, this gain in population implies an increase of 6,400,000 bushels of wheat per year. It has been shown by official returns that the wheat exports from the United States range from 80,000,000 to 120,000,000 bushels a year. The increase of 6,400,000 bushels a year in consumption means that, accepting the smallest yearly export as a basis of computation, the exports will cease in fifteen years, while the largest export would set the limit at less than twenty years. These figures look big. They are big. They are also entirely true. This is a big country in every way, and the former European habit of scoffing at every thing American as "something big" is rapidly giving place to a habit of accepting American things for what they are. THE MILLING WORLD believes that Great Britain, in particular, is looking forward to the extinction of the American flour and wheat export trade, not with feelings of jubilation, but with feelings of consternation. That insular country must import wheat or starve. The world outside of the United States is not showing itself capable of the indefinite expansion of wheat-culture so often boasted, and Great Britain and other grain-importing countries are seriously concerned in the American wheat surplus. Many millers now in the business will live to see the day when the term "flour exports" from this country will sound like ancient history.

The DAWSON ROLL WORKS CO.

FOUNDERS & MACHINISTS,

—MANUFACTURERS OF THE—

Dawson Roller Mills

—AND FURNISHERS OF—

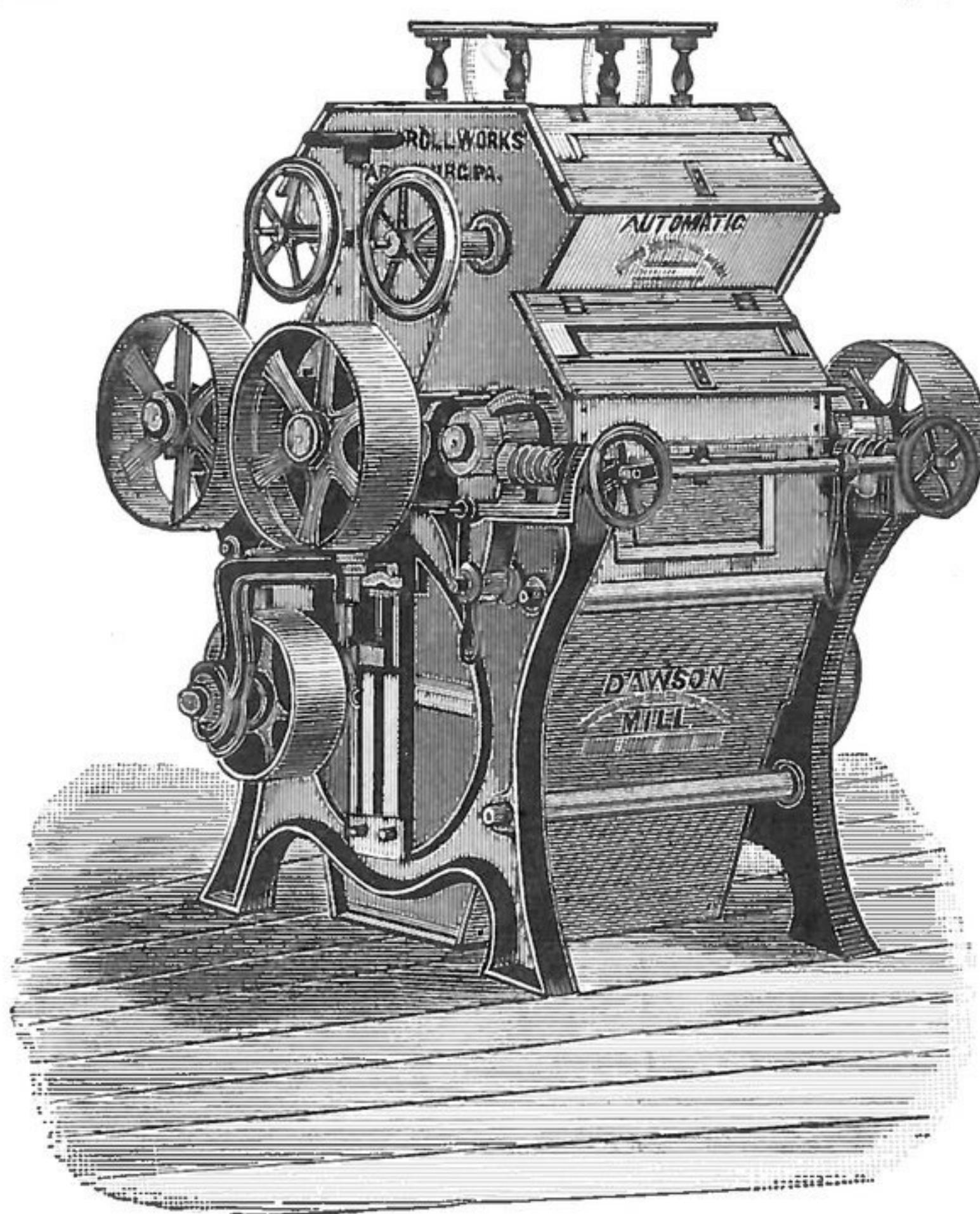
CHILLED IRON ROLLS

WITH DAWSON PATENT CORRUGATION.

ALL STYLES OF FLOUR MILL ROLLS RE-GROUND AND RE-CORRUGATED WITH ANY FORM OF CORRUGATION.

We have had large and extended experience in grinding and corrugating chilled rolls for milling, and have one of the largest and most improved plants in the country for this work, which enables us to meet the most exacting requirements of the trade promptly.

ORDERS AND CORRESPONDENCE SOLICITED.



DAWSON ROLL WORKS CO.

South and Short Streets,

HARRISBURG, PA.



BEST STEEL SAFETY MADE FOR
\$35

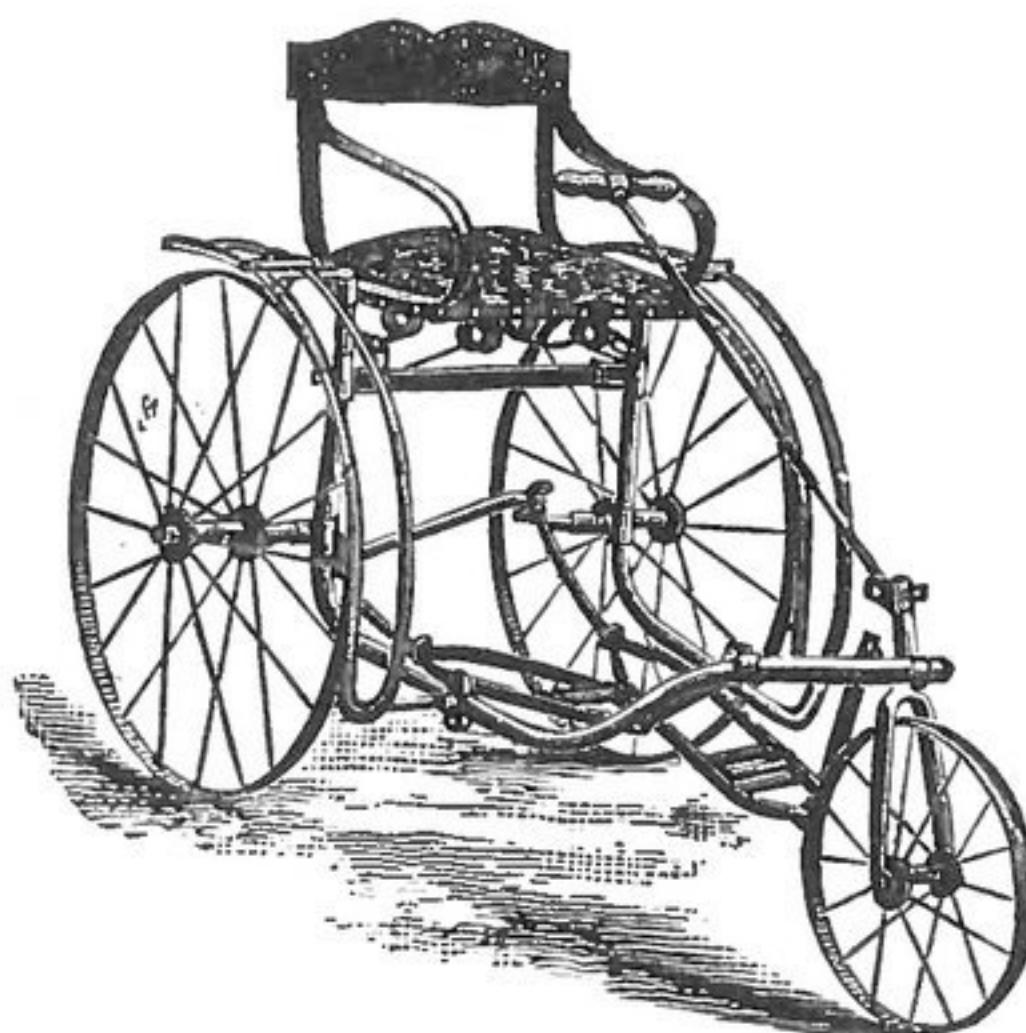
Easiest LADIES' Tricycle Known

Our Tricycles the Only Machine ever Recommended by Physicians for Ladies and Girls of a Delicate Constitution.

THE BUFFALO TRICYCLE CO.

Manufacturers of Ladies' and Girls' Tricycles, Ladies' and Boys' Safety Bicycles, Etc., Etc.

640 Linwood Ave., BUFFALO, N. Y.
SEND FOR CATALOGUE AND PRICES.



L. L. WHITLOCK,
Advertising Agent

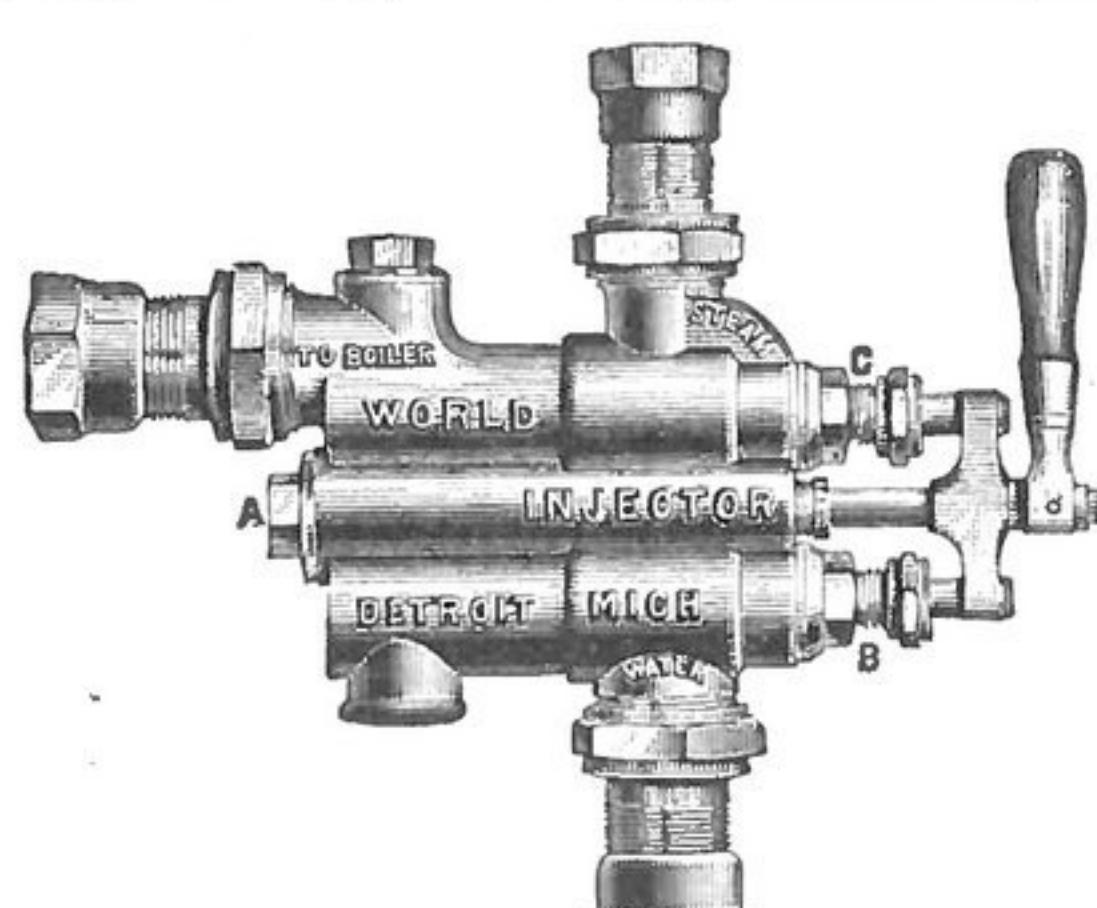
FOR MANUFACTURERS.

TRADE JOURNALS A SPECIALTY.

P. O. DRAWER 5323. *Boston, Mass.*

As Agent for Advertisers instead of Papers, I obtain the Best Rates Possible for my Customers.

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IS MADE BY THE
QUEEN CITY PRINTING INK CO.
CINCINNATI, O.



THE Best is the Cheapest. Whenever you want a Boiler Feeder that will prove reliable under all circumstances, buy the WORLD Injector. It is absolutely the simplest and safest to operate and handle of any injector now on the market, FOR it is operated by a single lever only. In whatever territory you find these reliable World Injectors on SALE they are always guaranteed by the seller.

GOLD is good in whatever part of the world you may travel, and the "WORLD" Injector is worth every DOLLAR it will cost you. Catalogue containing Price List, valuable tables, and useful facts, figures and information SENT to engineers, machinists, and all interested in a perfect working injector, post-paid, upon application, FREE

AMERICAN INJECTOR COMPANY,

175 Larned Street West, DETROIT, MICH.

PUBLISHED EVERY MONDAY. OFFICES: { Corner Pearl and Seneca Streets, Over Bank of Attica.

McFAUL & NOLAN, - - - PROPRIETORS.
THOMAS MC FAUL. JAMES NOLAN.

SUBSCRIPTION.

In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in unregistered letter at sender's risk.

To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year, in advance.

Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

ADVERTISING.

Rates for ordinary advertising made known on application.

Advertisements of Mills for Sale or to Rent; Partners, Help or Situation Wanted, or of a similar character One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisement taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.

Orders for new advertisements should reach this office on Friday morning to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

EDITOR'S ANNOUNCEMENTS.

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.

Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.

This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.

Address all communications

THE MILLING WORLD,
BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

SITUATIONS WANTED.

Advertisements under this head, 25 cents each insertion for 25 words, and 1 cent for each additional word. Cash with order. Four consecutive insertions will be given for the price of three.

SITUATION WANTED.

Head miller with over 20 years experience want to make a change this spring. Address, A. MILLER, 67 Weaver Alley Buffalo, N. Y.

SPECIAL ADVERTISEMENTS.

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 3 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office 10 cents must be added to pay postage.

FOR SALE.

Water-power grist and feed mill for sale, at wharf and railroad, near New York. Established business, \$4,000. J. W. ATWATER, 150 Broadway, New York. 1720

VALUABLE ENGLISH PATENTS FOR SALE.

THE COCHRANE ONE BELT DRIVE.

The patents for England issued to the late W. F. Cochrane for improvements in roller mills. Address, J. V. TEETZEL, Hamilton, Ontario, Canada. 1316

FOR RENT.

Clinton Mills, at Black Rock, Buffalo, for rent on reasonable terms, recently repaired and put in good order. Apply to CHAS. DANIELS, over 811 Main Street, Buffalo, N. Y. 676

PARTNER WANTED.

A man with capital to take an interest in a new 50-bbl. Roller, Flour and Feed mill. First class water-power. Every thing entirely new and in first class running order. A practical miller preferred. For further particulars address BILLINGS, REDHEAD & CO., Avoca, Steuben County N. Y. 1215

FOR SALE AT AUCTION.

Flouring mill, water and steam power, will be sold at public auction on July 17th, 1890, at 2 o'clock P. M., on the premises. Water power good for nine months in the year. Capacity sixty barrels. A good established custom and exchange trade. Case roller process. Death of proprietor cause of sale. Terms: one-third cash, one-third in one year and one-third in two years, with six per cent interest, secured by mortgage on the premises. For particulars, address J. H. HATCH, Piqua, Ohio. 1920

MILL MACHINERY FOR SALE.

One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make.
One 20-Inch Under-Runner Portable Mill, French Buhr Stone, capacity 10 to 12 bushels per hour; new, best make.
One 14-Inch Vertical Feed Mill; best make, new, a bargain.
One No. 6 Dustless Separator; new, a bargain.
One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.
Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.
Three No. 1 Corn Shellers, capacity 200 to 300 bushels per hour; new.
One No. 2 Purifier. New. Best make. A bargain.
One 20-Inch Portable Mill.
One 18-Inch Double Gear Portable Mill.
For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y. 576

WILL some one kindly tell us what has become of the Scandinavian Elevator Company, of Minnesota, capital stock \$5,000,000?

THE jute-bag and burlaps nightmare dances heavily on the stomach of the enfeebled Millers' National Association. The dance may fairly be described as un-Barry-ble.

ONE milling point was prominently provided for at Minneapolis, and that was the "feed." It may be said the "feed" was perfect, with no choking, no unevenness, no lumps and no "growling."

DIALOGUE between a miller who was not at the Minneapolis convention and one who was: "What was done at the meeting?" "Nothing." "What was left undone?" "Everything." "Why did you go?" "To enjoy the picnic and the big feed."

RECKLESS Editor Hall refers to the "Yahoo" man as "Willie Edgar"! In the name of Minneapolis ozone and padded census returns, what will be the outcome of such altivolant rashness? Hi! Ranck, Mitchell, Reifsneider, all of you, form a ring! There's gore galore on the lunar orb!

POSSIBLY the call for a new secretary for the National at Minneapolis, while ostensibly directed in another direction, really covered a movement to get S. H. Seamans into the office. The call was a singular one, but the history of the National is full of singularities all the way. Secretary Barry is too good a man for the place, and when he will not bend, he must break.

EX-SECRETARY and present treasurer S. H. Seamans of the Millers' National Association is out in a long letter denying all the statements made in the history of the National distributed by Editor Ranck at the Minneapolis convention. We rather think Editor Ranck has the facts on his side, and that he is therefore not to be unhorsed by a mere general denial by Mr. Seamans.

THE echoes of the late Minneapolis convention must be cheerful reading to the managers. Most of the journals in the milling line denounce it as a convention farce and a picnic success. One or two, who praise it, shut their eyes to the barren record and damn the fiasco by praising the picnic feature alone. Outspoken commendation, squarely based on valuable achievements, there is none.

RAILROADS in the western and southwestern States are bombarded by the millers of rival cities and sections. Each section demands that all the disadvantages of space and location, to which it is heir, shall be abolished by the railroads. Surely the railroads will have plenty of work if they are to be compelled to make up to each city or county the disadvantage of its location. Insanity seems to be the chief feature in most of the attacks on the railroads. No favor seems too great to expect or demand from them. No burden seems too intolerable to thrust upon them.

MILLERS will do well to keep track of the suit of the Consolidated Roller Mill Company against F. Arnold, of St. Cloud, Minnesota, reported at the Minneapolis convention. That suit is said to be on "process," and the outcome may be of general interest to roller-millers. It is improbable that the courts will allow the claims of the Consolidated, but roller-millers should take an active interest in every suit of this character. The peculiar move of the Millers' National in refusing to "protect" Mr. Arnold, who is a member of that body, will cause millers to hold a poor opinion of the power of the National to "protect" any one. Millers outside the National can combine and fight all monopolies quite as well as they could if they were members of the National. At all events, it must be the courts, not the "1,412 units" of the Millers' National Association, that will settle claims, perfect titles and punish infringements. The Consolidated Roller Mill Company is a good deal like the Millers' National Association, prone to great thunderings in the index, and always reaching a lame and impotent conclusion.

A NEW STRIKE FEATURE.

A. B. SALOM.

LABORERS and capitalists are equally interested in a new feature that may, in the near future, be engrafted upon the "strike." This feature will be understood from the bald statement that, at the close of the recent strike among the employes of the Illinois Central Railroad in Chicago, the strikers demanded that the company should pay them their full wages for the time lost in the strike. Properly, promptly and absolutely, the company refused that demand, and work was resumed without an attempt to enforce the demand. The superficial observer may declare that the resumption of work without an attempt to enforce this amazing extortion settles the point at once and forever. Observers who have made a close study of strikers, of laborers and their professional "leaders," do not believe that the point is settled in that way at all, and there is a very general belief that this demand was made after deliberation by the men who are drawing large salaries to mislead laborers. It is believed, and it is highly probable, that the strikers in this case were ordered to make this demand for the express purpose of introducing to the public, to labor and capital alike, a new feature in strikes. Probably they did not intend to make a stand upon the point, but they have brought to public attention a new and a most astonishing departure.

Evidently the strikers have decided to settle the entire cost of strikes upon capital and upon the general public. Up to this time all strikers have entailed heavy losses that have been about equally distributed between capital and labor. According to the new idea advanced in Chicago, hereafter, in case firms, companies or corporations allow a strike to occur, they must expect to lose all their business during the strike, and, when work is resumed, they must expect to pay the strikers for all the days during which no work was done! This is a pretty programme. In the case of the railroad mentioned the suspension of work continued four-and-a-half days. During those days hundreds of thousands of dollars were lost by the company, in freight and passenger traffic and in perishable freight, ruined by the enforced delay, for which the company must pay. The strikers who caused this loss would increase the total by extorting wages for the days on which they did not work. Plainly, to submit to such an extortion, under any conceivable circumstances, would be suicide pure and simple, and the company deserve commendation for promptly checking the crime.

Insanity and injustice are often charged to strikers, and this Chicago incident goes far towards justifying the charge. Let any man, with sufficient intelligence to add two and two, or to understand the relation between the plainest of causes and effects, consider the inevitable consequences of the adoption of such a rule by strikers. Should capital yield to such an extortion, it would at once throw all industries into chaos. Strikers, being assured of their power to exact pay for work not done, would have no reason for remaining at work. On the slightest provocation, just or unjust, they would quit work. Wages for idleness they would prefer to wages for work, and the only thing done by workers would be striking on frivolous pretexts. It might be possible to keep industries going under such conditions, but it would be done at so enormous a cost to capital that capital would be forced to give up. The crazy anarchists who have inspired this new movement have only one end in view, and that is plunder, chaos, ruination.

Recent events have somewhat tended to encourage the hope that labor had been emancipated from the thrall of the demagogues, who thrive upon the disaster which they have forced upon labor, but this incident, if it really is to be taken as an indication of what is being planned and thought in the inner circles of the agitators and demagogues, discourages the optimist. Of course, there is no chance whatever for this demand to be enforced successfully. When once it is fairly made, the public and the capitalist will instantly perceive that the moment for heroic remedies has arrived, and those remedies will be applied mercilessly. This insolent demand is characteristic of the demagogues who have been

misleading laborers, and it carries its curse with it. With the new cry of "full wages for full time lost in strikes" as a rallying shout, labor invites the solid opposition of the community, and that opposition will be too powerful for labor to withstand with the least chance of success. Other monstrous mistakes or crimes committed by these same men have been severely punished in the end, and there is no reason to fear that this extortion will succeed. It is so gross a blunder, so palpable a crime against all the laws of common-sense and business, that it will meet sudden and severe penalties whenever it invites them.

Laboring men can not afford to take up this new error of the demagogues. They have the right to strike, but surely even the stupidest and craziest among them will hardly claim that they have any sort of right to wages lost by them while they are striking. They must see that this movement is wholly desperate. Striking has generally hurt the strikers more than the employers, because the idea of the strike is a radically wrong one, all the advantages being with capital and all the disadvantages with labor, and all the instrumentalities used by the strikers generally being of such a character that success could never have been achieved through them. Labor can not afford to be hostile to capital, and it can never come to pass that virtual highway robbery, on the Chicago anarchistic basis, will be possible. True friends of labor will regret to see labor inclining to the use of new and criminal methods of continuing a losing warfare. The errors and crimes of the near past, with their disasters, losses and defeats, ought to influence the men concerned. Riot has failed. Arson has failed. Bloodshed has been punished. Destruction of property has not advanced the interests of labor. Boycotting has become a dead letter. Not a single vicious instrument employed by labor has helped labor. Now let labor wisely refrain from further attempts to rob, to destroy, to extort unearned wages, and to annihilate the very things upon which it must depend for its existence.

New departures may be, and should be, made, and they should be departures from the insane and criminal tactics of the past. Brutal methods, unreasonable exactions, violence, unreason and all the other disagreeables of the unsuccessful past should be thrown aside. Labor's only friend is capital, however much the demagogues may assert the contrary. The hostility between the two elements, in this country, at least, is mainly on the side of labor. It is high time that labor should acknowledge more, claim less, be more reasonable and employ sane methods. If the Chicago idea of extorting wages for time spent in strikes is to come to the front, labor is preparing a battle that will inevitably result in disaster. The duty of the hour is to halt. False steps now will entail misery in the future.

POINTS IN MILLING.

Now that the Hungarian flour-makers have reduced their number of grades of flour from 13 to 9, we may expect to see them advancing still further by dropping several more grades from the shortened list which they will adopt on September 1, 1890. The new Hungarian grades are to be Nos. 0, 1, 2, 3, 4, 5, 6, 7 and 8, and the last one is classed as feed, leaving only 8 grades for what is called flour. American flour-makers have long been informed that Hungarian flour-makers are the most successful in the world, and that Hungarian flour is the very finest in the world. Hungarian milling writers have always insisted contemptuously that any comparison of American flour with Hungarian flour was an insult to Hungarian flour-makers. In this they have generally been seconded by British writers on milling, who even went so far as to classify the American flour that reached England as "merely respectable offal." The consensus of European opinion bore strongly against the American millers and their product, and all the time the American flour has been finding larger and larger sales in Europe.

THIS state of affairs demonstrates the power of facts over theory. The European critics, who have never made themselves familiar with the highest grades of American flour,

judged the whole output of American mills by the medium grades that are generally exported, and they arrived at the conclusion that American millers understand how to make common grades only. The change in the Hungarian programme seems to mean that the Hungarian millers, at least and at last, have learned something which they either did not know before, or else were simply unable or unwilling to believe. Market figures and statistical returns have rudely overthrown their crude and prejudiced opinions of American milling and competition, and they are actually attempting to practice American ideas, evidently with the intention of discovering the secret of the vitality of the American competition.

IT is not announced that the new numbering implies any let-down in the fineness of the highest Hungarian grades. Probably Nos. 0, 1 and 2 will be kept up to their present grade of fineness. The chief importance of the reduction of numbers will probably show in the grades below No. 2 or No. 3. That change will probably have little or no effect on the competition of Hungarian export grades with American export grades. At the same time, such a change, in the very home of high milling, the home of elaborate long-system grinding, is an interesting phenomenon in milling. It will have an influence on European milling in general, and especially in sections where there is competition with the great mills concerned in the new grading. It may possibly mean that, in consequence of short crops at home, import duties raised in other countries, and generally unsatisfactory conditions all around, the Hungarian millers are finding the exporting business unprofitable, and that they are about to make an effort to dispose of their product at home. On this theory it would be natural for them to grade their product so that they would be in a position to cater to the custom now held by small and old-fashioned mills in Austria-Hungary. If this is their aim, there are lively times ahead for the "small millers" of that country. Meanwhile, let it be noted that the new arrangement, which takes effect on September 1, is nothing less than a "revolution" in Hungarian milling.

AMERICAN roller-milling may justly be said to reach from the lowest extreme to the highest. Among recent mills brought out is one that is designed for grist-mills, and it is a one-break mill. It is said to be in successful operation in several places. I have not run across it, nor have I seen any of the product from such a mill. Whatever may be its merits or demerits, it can not be denied that it marks the "shortest short system" in existence. I do not know the longest system of reduction actually practiced in the United States, but I feel safe in saying that the one-reduction grist-mill alluded to is certainly the "shortest." There is only one more move downward possible, and that is a no-reduction system. This will probably be advocated by the bran-cranks, who will argue that it is better to eat whole grain, coat, fuzz, awns, seam-dirt and all. If there ever comes out a no-reduction mill, it will probably supply the bran-cranks with unbroken grain. I doubt that there are enough real bran-cranks in the United States to consume the product of the smallest mill in the country. Most people sensibly prefer a clean and digestible, assimilable flour.

NOTWITHSTANDING your editorial note on my recent assertion that the new winter wheat is badly shriveled in some sections, the fact is that there is a good deal of shriveled grain in the new crop. In the past week I have seen enough to satisfy me that in some localities the grain is quite as bad as the "bulls" could desire. Other localities show up better.

DON'T run your mill till it collapses. Look ahead. Care in anticipating breakages is proper care, as it will save expensive repairs and stoppages. When you see a part wearing out and getting ready to break, be on hand with the new part for replacement. If you let the worn-out part run till it breaks, it may, when it breaks, smash other parts. Such

a break in a mill is a "bad break" in every sense of the term. To prevent is easier and cheaper than to cure.

NEVER stop a mill unnecessarily. At the same time, never run a mill so long that stoppage is forced. Keep everything, everywhere, in shape all the time.

WATCH your "automatic" machines. Even "automatic" machines have been known to fail to work at critical points. When the miller ceases to watch his machines, "the devil gets in 'em," and then there's mischief, costly mischief.

WHEN you buy machines, don't run risks in buying so-called "cheap" ones. The only machine that is really "cheap" in the long run is the one that always does good work. All others are shams and "dear" at any price. The penurious buyer will generally end with a plant overladen with unsatisfactory machinery. Such a man deserves no sympathy. There are good machines offered for all milling work, and the miller who fails to select the good ones is either too stupid to know the good from the poor, or too penurious to pay the price of the good ones. If he gets "left" through his own stupidity or meanness, tears are out of order. He makes his own funeral.

THE same reasoning holds good in hiring a miller. The man who is confessedly "cheap," who is afraid to ask a fair price for his work, is generally a "dear" man. Good men are cheap at the highest wages. Poor men are dear at the lowest wages. Hire poor operatives to destroy poor machinery, and thus kill two birds with one stone. But if you have good machines, hire good men to handle them, to preserve them, to get the best service out of them. The tramp or the scrub may develop into a good hand, but the chances are all against it. Risks with men are quite as dangerous as risks with machines.

THE only miller who can "afford to burn out" is the miller whose plant is worthless. The miller who owns a good plant can never "afford to burn out," even though his insurance really covers the value of his plant. The miller who has a poor plant can not afford to escape burning out, even though he is without insurance. The worthless mill burned may give the owner a chance to get a good mill. See?

EUROPEAN MILLERS AND WAGES.

Says our transatlantic cotemporary, the London "Miller," in an article on hours and wages in Europe: Perhaps the most important fact to be deduced from the interesting communications which, under the title of "The Labor Question," have appeared in the last two issues of "The Miller," is that the continental operative miller labors for wages and under conditions which were totally unknown to his father and grandfather. Of course the replies thus returned to the questions are essentially general; their authors, although in every case well qualified to speak as to the conditions of flour-mill labor in their particular lands, are yet obliged to strike a mean in scheduling the hours exacted and pay granted, but the average thus presented may without doubt be accepted as a faithful index to the general condition of working millers in the various countries indicated. Long hours and small pay have been the lot of the journeyman miller from time immemorial, and the comparative improvement that has been witnessed by the past decade is probably due to the changes which that period has brought forth in the manufacture of flour. The milling trade has undergone a complete domestic revolution, and the production of fine white flour by means of elaborate machinery has, perchance, created a demand for skilled labor, an article which is only obtainable by the concession of higher wages and more considerate treatment of the worker.

That this economic law has been again proved by practice is abundantly clear from these continental returns. Thus the rate of wages is seen to be highest in countries where the roller system has obtained the surest footing, or, at any rate, is most widely diffused. In those lands, on the other

hand, where the old and modern methods of milling flourish side by side, the less skilled has apparently somewhat lowered the scale of pay of the higher labor. Thus in Belgium, where a number of large merchant mills have been erected and fitted on modern principles during the past few years, the pay of stonedressers and rollermen varies from \$23 to \$29 a month, while in the neighboring state of Holland, which is now also well found in roller mills, the level of remuneration is a trifle higher, foremen receiving about \$11 a week, and the wages of stonemen and rollermen ranging from \$8.07 to \$8.90 a week. It is noteworthy that the roller tender has, in the apportionment of wages, a slight advantage over his brother who tends the millstones. In France, where 38,000,000 people are fed to a large extent by some 60,000 flour-mills, mostly of small dimensions, the working miller is less well paid. It is very usual in the smaller French mills, and even in those of medium capacity, for the operatives to be boarded and lodged on the premises, and in such cases the wages of foremen, stone-dressers and rollermen range between \$15.55 and \$16.56 a month. This scale of pay is above the level of Germany, where the "boarding in system" is also very prevalent, and where the wages of millers working under these conditions vary from \$2.67 to \$4.86 a week.

A monthly table of wages forwarded by one of our correspondents gives a very interesting view of the interior organization of the larger mills of Germany. From this it appears that while a break rollerman, that is, a tender of chilled-iron grooved rolls, gets from \$19.44 to \$21.87 a month, the porcelain rollerman only receives \$18.23; the wage of a stoneman is a little lower, \$17, but silksmen and smuttermen respectively earn as much as the tender of porcelain rolls. On the other hand, the operative who is busied with the bolting-reels has to be content with \$16 a month.

Considering the quality of their work, Austrian operative millers are evidently not in receipt of extravagant remuneration. A foreman does not obtain on an average above \$4.86 a week, and he may have to be satisfied with even less. The wages of the rest of the mill staff are calculated on this basis, and it is worth noticing that in the Austrian operative hierarchy the head purifermen rank above the rollermen and stonemen, for while the former are paid from \$4.13 to \$4.62 a week, the hebdomadal wage of the latter does not rise above \$3.92 at the most. It is not stated whether the practice of boarding and lodging flour-mill operatives obtains in Austria, but we believe that it is quite prevalent, in which case the pay quoted will not seem so inadequate.

It is somewhat remarkable that in Hungary, the home of modern milling, the working miller is in the matter of wages even worse off than in Austria. The phenomenon is probably explicable by the fact that Hungarian flour-mills, although they produce flour of unexceptionable quality by means of a very elaborate system, are content to employ a great deal of hand labor. It is alleged that even to this day Budapest, which has been well called the European milling capital, does not possess a single automatic flour-mill, in the proper sense of that term. Be this as it may, it appears that on an average the weekly pay of rollermen in Hungary is only some \$3.22 to \$3.65, while the head silksman, who here again ranks a step higher, earns from \$3.40 to \$3.89 a week. The operative entrusted with the care of the reels is placed on the same level as the rollerman, but the stone-dresser takes a place next to the assistant foreman and in some instances is paid \$4.13 a week. The latter is an important individual, as it falls to his lot to take control of the mill whenever the foreman is absent, and as a rule all work of supervision at night is discharged by him. But his wage does not rise above \$3.89 to \$4.37 a week, and in his case, as in that of his subordinates, the slender pay is not apparently counterbalanced by free board and lodging. If Hungary, however, is not generous to the working miller of humble degree, the same can not be said of her treatment of the head foreman or head miller, seeing that the yearly salary of such a functionary is calculated to range between \$607 to \$806, to which must be added the valuable privileges of free board, firing and lighting.

Italy is not a country where the scale of wages is high, and yet here the operative flour-miller is, so far as can be judged, better off than in Hungary, seeing that in a mill of medium size the foreman receives at least \$5.83 a week and is also accommodated with free lodging and light; he is even said to be occasionally admitted to a share in the profits of the mill, but such concessions doubtless apply only to operatives of exceptional skill and intelligence. As we descend the Italian scale we find that, while the rollerman can earn about \$4.13 a week, the wage of the silksman ranges between \$2.85 and \$3.40, and that of the flour-mixer attains the same level. On the other hand, stone-dressers, whose calling in Italy seems to be fast disappearing, can make some \$4.61 to \$4.86 a week when they can find work.

Spain hardly counts as an industrial land, but it possesses many flour-mills erected and fitted on modern principles, and in such establishments wages are fairly high. In Barcelona the spareman, working Sunday, earns \$4.86 a week, while rollermen are paid from \$6.80 to \$13.60 under similar conditions. In some other parts of Spain the wages of sparemen are much lower, but the pay of rollermen and skilled millstone dressers may be reckoned at the figures quoted.

Neither Russia nor Turkey abounds in well-equipped merchant mills, but a number of such establishments are to be found in both lands, especially in South Russia, and in such mills competent men can obtain reasonable wages. A good foreman in Russia can secure from \$48 to \$72 a month, while an efficient stone-dresser is reckoned to be worth \$24 to \$29 a month, and rollermen receive from \$14 to \$19 for the same spell of work. Good wages are also to be earned in Turkey, but, of course, the handsome salaries of \$1,312 and \$1,361 a year mentioned in this correspondence can only be secured by men who in this country would be described as mill-managers; moreover, whoever is placed at the head of a large Turkish mill appears to be accountable for any shortage of weight in the flour-sacks, and this heavy liability must tend to rub a good deal of gilt off the gingerbread of salary. Still, it is not to be disputed that in Turkey the wages of flour-millers competent to work modern machinery are calculated on a liberal basis; thus a stoneman can earn from \$26 to \$43 a month, according to his abilities, while spouts-men and strapmen each receive from \$13 to \$17.50 a month. On the other hand the purely unskilled laborer, represented here by the spareman, does not on an average receive much more than a shilling a day; but it should be added that this meager pay is supplemented by free lodging and a loaf of bread a day.

For the rest the mere laborer fares little better the whole Continent over. Perhaps he does best in France, where he may earn \$11.66 a month in addition to board and lodging; but in Belgium he will not receive more than \$3.40 a week at the most without either board or lodging, and in Holland he will be in much the same case. The weekly pay of the unskilled mill laborer never rises above \$2.43, or at the most \$3.16 a week in either Germany, Austria, Hungary or Italy, and although in some parts of Spain he may earn 75 cents a day, he will not on an average receive much more than half that sum. In Russia the pay of a spareman is reckoned as varying from \$1.94 to \$2.43 a week.

So much for the remuneration of flour-mill labor on the Continent of Europe. There is apparently not much variation in the general conditions under which continental flour-milling operatives work, that is, so far as the hours of labor are concerned. A 12-hour shift is the general rule all over Europe, but, on the other hand, some countries are evidently much more liberal than others in the time allowed for rest and refreshment. In Holland two hours are allotted in each working shift for meals and repose, compared with one hour in Belgium. Spain has a two-hour allowance, and in Russia 1½ hours are granted out of each shift. A noticeable reticence has been observed by many correspondents in regard to Sunday labor, and it is to be feared that this practice is still too prevalent in many continental mills. Sunday work is admittedly the rule in Spain, but the operative receives a double wage, and in Holland, where some mills work on Sunday, the miller receives one-fifth of a week's pay for the

seventh day's labor. It is at least some consolation to know that the general set of opinion is adverse to Sunday labor, and that even where it exists the worker usually receives some compensation in the shape of an increased wage.

AN IMPROVED ROLLER-MILL.

The Flenniken Turbine Company, of Dubuque, Iowa, have lately received a notification from the Patent Office that their application for a patent on an improved roller-mill has been granted. The main features of the machine, which will attract the attention of millers, are the following: 1. A universal bearing-journal for the adjustable roll, which automatically aligns itself to the journal in any position without friction or heat. 2. A spreading-device which slackens the tension on the drive-belts and springs when the rolls are spread. This allows them a rest when not grinding, which prolongs their durability and usefulness. 3. The adjustment of the rolls can be made at each end separately or both together, at the will of the operator. 4. The feeding-device is a vertical shaker motion, which does not vibrate the frame of the mill. It is automatic in its action and is under perfect control. 5. The spreading of the rolls stops the feeding of the material without handling an extra lever. 6. Still another radical improvement is a frame of unexcelled rigidity, symmetry and cleanliness, which extends above the rolls and embraces the hoppers, feeders and bearings of the complete machine, which is a new departure in roller-mill construction.

GRAIN-TESTING IN CANADA.

David Plewes, Secretary of the Dominion Millers' Association, writes as follows on the subject of the grain-tester: "During last session of the Dominion Parliament great pressure was brought to bear on the government by some members from rural constituencies to compel grain-buyers to use peck or half-bushel measures to test the weight of grain per standard measured bushel, instead of the two-quart tester now in general use. The chief argument used openly was that, if those small measures made $\frac{1}{2}$ pound mistake, the $\frac{1}{2}$ pound multiplied by 16, would make 4 pounds difference on a bushel; whereas $\frac{1}{2}$ pound on the 1-16-bushel tester would only be $\frac{1}{2}$ pound on the bushel, for the difference on the tester only marked the difference on the full bushel measure. If this assertion were correct, then a tester that made wheat weigh by mistake 4 pounds less than a measured standard bushel, their system would multiply the 4 pounds by 16, making a total of 64 pounds loss on a measured bushel, really making a standard bushel weigh 4 pounds less than nothing. This was their open objection; the secret desire was to pass 56-pound wheat as standard wheat. Under this pressure the government by order in council has ceased to recognize any grain measures less than peck measures, but at the same time does not prohibit the use of the two-quart tester wherever or whenever the grain buyer chooses to use it to satisfy his own mind of the gravity weight of any grain before he buys it. A cantankerous seller sells a buyer standard wheat and attempts to deliver wheat of less gravity weight than standard, then in order to prove a legal breach of contract a peck or half-bushel measure would have to be used in order to secure a conviction in a court of law. For all practical purposes this order in council need not deter millers from buying wheat by standard as heretofore. All they have to do is to use their tester before buying and bid according to their regular buying scale after testing. The seller, as heretofore, can refuse and go elsewhere to sell his wheat if he chooses to do so. But to whom will he go but to the Canadian miller who has paid him five to ten cents per bushel for the past two years more than any other buyer would pay? If a slippery seller shows an inclination to deliver poorer wheat than sample sold by (I have known such men), it will be well to have a peck measure near by to test with. However, with a very large proportion of the farmers who know the present testers give correct tests, there will be no trouble. It is only the few designing ones who will cause trouble, and they are generally known even before one sees their sample of wheat or makes a bargain."

Some newspapers have asserted that the government has suppressed the tester, but the following copy of the order in council on the subject proves clearly enough that such is not the purpose: "You are informed that, while this instrument ceases to be a legal arbiter of the weight per bushel of grain as between buyer and seller, it is not the intention of the Department to prohibit its use by grain-buyers or millers for the purpose of informing themselves thereon."

WHY ROLLS RUN HOT.

Writing on the hot-running of rolls, an English miller says: The heating of rolls may be traced to many causes, the first one of which is overloading and attempting to do too much work upon a given surface. If a roll is overloaded it will do far less work than where it has its legitimate feed, and there is also much greater liability to caking. The material in a horizontal roll should never be delivered directly into the center of the roll, for the reason that in so doing it is liable to drift in spots and bunches. The most perfect delivery of materials upon rolls is the laying of it upon the surface of one of the rolls in such a manner that it will spread itself. In horizontal rolls I have often stopped the "growling," so-called, by putting in a deflective board in such a manner that, instead of the feed dropping down into the center of the roll, it is delivered over on the side of the roll. This spreads it more perfectly, and instantly the growling ceases: and not only that, but the grinding will be found to be very greatly improved, and very much more of a reduction performed. It will also be found that the rolls may be set farther apart, and at the same time perform their function, for the reason that whenever material is passing in bunches the set must be so as to permit the rolls to spring forward when forced open by passing over the elevated points. In relation to the perfect delivery of feed upon a roll there can be little doubt that in a roller-mill constructed with one roll above another, whereby the material is delivered substantially at right angles with the roll, the spreading of the material is thereby greatly assisted, and this advantage will go a great way toward making the 2-high roller-mill the standard mill of the future, for the most perfect distribution of the stock over the entire surface is the most neglected yet most important element in roller-mills.

CATARRH.

CATARRHAL DEAFNESS—HAY FEVER.

A NEW HOME TREATMENT.

Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been formulated whereby catarrh, catarrhal deafness and hay fever are permanently cured in from one to three simple applications made at home by the patient once in two weeks.

N. B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of stamp to pay postage, by A. H. Dixon & Son, 337 and 339 West King street, Toronto, Canada.—*Christian Advocate.*

Sufferers from Catarrhal troubles should carefully read the above.

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TO CLEAN OLD BRASS.—Old brass may be cleaned to look like new by pouring strong ammonia on it and scrubbing with a scrub brush; the work is finished by rinsing in clear water.

GENERAL NOTES.

THE latest estimate makes the population of the world 1,440,000,000, of whom the semi-civilized Mongolians number 630,000,000, the civilized Aryans 545,000,000, the negroes 150,000,000, the Semitic or Jewish people 65,000,000, the Malaysians and Polynesians 35,000,000, and the North American and South American Indians 15,000,000.

CONTEMPORARY COMMENT.

The meeting of the National Association at Minneapolis, last month, marks a new and successful restoration of the prestige lately lost by it. In many ways it was a success, and much credit is due to those who managed it. In point of numbers it was an undoubted success, even although there were many stay-at-homes whose presence was expected. That the meeting was one given up to the interests of the larger mills, and that the little mills were pretty completely left out may be quite readily seen by those who read the reports of the meeting, as well as by the representatives of those small mills who were there. Eastern millers, who expected to have topics of interest to themselves considered in the recent meeting of the National Millers' Association, were disappointed, as what the convention did was done on behalf of and for the extensive milling concerns of the Northwest. The small mills of the country were ignored. Had the Association been true to its comprehensive name, the millers of a Nation, not of a section, would have shown their hand. A review of the proceedings of the June convention at Minneapolis must, in the mind of many eastern millers, give rise to the question, "Why were we asked to join an organization of millers that ignores our existence?" The millers of the Eastern States were not as fully represented as they should have been. This, of course, was the fault of themselves. There is a little suit at law, which has been before a referee for some months past in Pennsylvania, which, upon an adverse decision will give more trouble to the millers of the whole country than all the subjects of complaint brought before the meeting put together, and still there was no one present to bring up the subject.—*Philadelphia "Millers' Review."*

The Southern people have for a long time realized that their fair section was not destined to be merely an agricultural region, and that they were not fated to be forever the "drawers of water and hewers of stone" for their rich manufacturing neighbors of the Northeast, merely furnishing the raw material for the manufacturer to weave into fabrics and return to them at a great profit.—*Atlanta "Dixie."*

It would be far better for such publications as "Bradstreet's" to present reasonable estimates of the crops of the United States. The growth of this country appears to be lost sight of, and the largely increased manufacture of special articles from the different cereals is unnoticed in compilations of the crop estimates and the food consumption.—*Chicago "Daily Trade Bulletin."* No, neither "Bradstreet's" nor any other publication should indulge in mere "estimates." It is in "estimates" based on insufficient information the principal trouble lies. When a journal sits deliberately down to the work of guessing and tabulating its guesses, as many self-styled class journals evidently do, it is time for business men to protest. Whether the guesser be Prognosticator Prime or "Bradstreet's" is all one. What the public wants is information like that furnished in the Dodge re-

ports. Having the information, the public can make all the necessary "estimates."

The proposed establishment of an Intermediate Court of Appeals for the trial of patent cases would no doubt be a judicious measure.—*New York "Mechanical News."*

Less than 25 members voted in favor of the new constitution. Above 125 refused to vote at all. The vote was spontaneous as well as unanimous.—*Indianapolis "Millstone."*

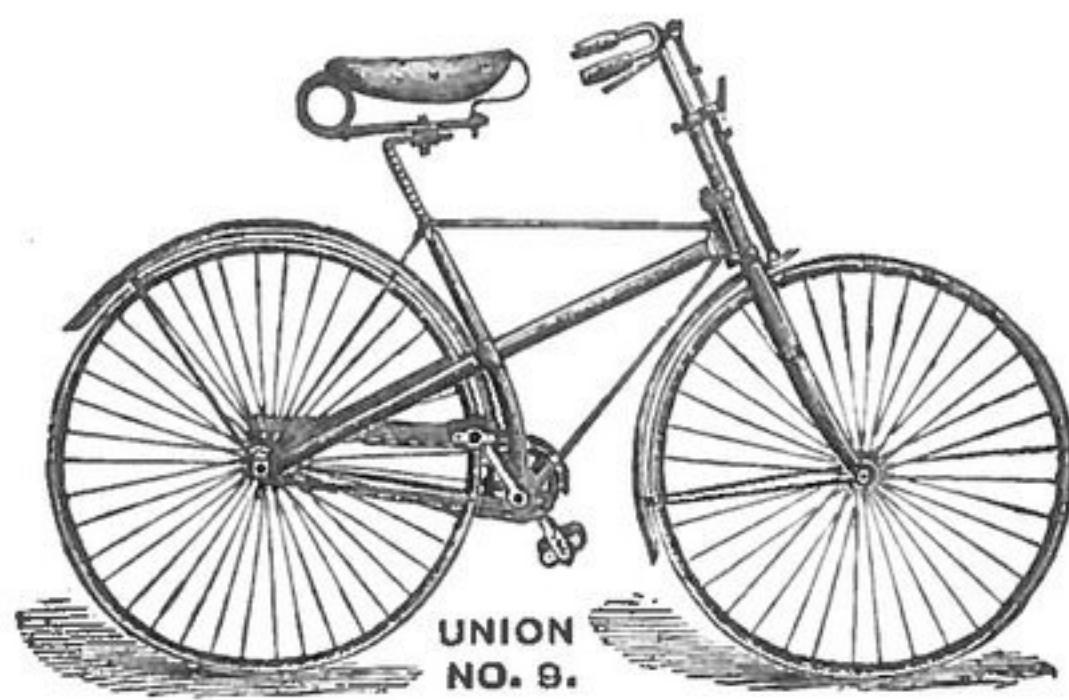
HOT GRINDING IS INJURIOUS.

Discussing the subject of hot grinding, James Curtis, of Moscow Mills, Missouri, says in the "Modern Miller": "A miller is quoted as expressing his belief that hot grinding is a benefit instead of an injury, but gives no proofs. He states that to cause injury the heat must be that of a baker's oven. To convert starch into dextrine a temperature of 150 degrees is necessary, and the presence of such a large quantity of dextrine in the roller flour proves that point is reached, and, probably, much higher. He says the heat caused by grinding within frictional heat inflicts no injury. That is correct. With the differential rolls he can not avoid external friction on his flour particles, but with equal speeded or non-differential rolls the only friction would be that of the particles of wheat on each other. The expressions of beliefs and opinions are not proofs, and any one interested in this matter (and who is not, as it affects the consumers who have to use the damaged medley as well as the millers who make it?) may easily perform these two experiments and set any doubts at rest: First—Take a large glass jar or bottle half full of flour, and with cold distilled or rain water make into a paste; fill up with water; stir or shake several times in the course of an hour; let it settle all night; pour the clear fluid into a dish and let it evaporate. The amount of dextrine mucilage remaining varies with the grade of the flour, less in the highest than in the lowest, as the last has encountered more friction. This ought to convince any one that hot grinding is injurious. Seeing that there is but one grade of flour material in wheat, there should be but one grade of flour, but the hot differential rolls make several grades by their excessive friction. The oftener the flour is passed between the rolls the lower the grade. Second—In a glass vessel of distilled or rain water put a few drops of pure sulphuric acid. In another containing the same kind of water dissolve a few grains of yellow prussiate of potash. With a non-metallic flour-trier dip the flour to be tested in the acidulated water. After a minute dip it into the potash solution. Treat stone flour the same way and note the difference in the color of the two. The roller flour is a deeper blue, proving that it is caused by the amount of iron worn off the rolls by external friction. The lower the grade the bluer. If any miller, after testing this way, is still in doubt, he can make a forcibly convincing experiment by starting in to grind a barrel of gunpowder, and I predict that in a short time, if he had the power to express an opinion, he would declare that hot grinding is injurious."

GOLD AND SILVER VALUES.

Silver, in its relative value to gold, has varied greatly at different times. In the days of the patriarch Abraham it was 8 to 1. B. C. 1,000 it was 12 to 1; B. C. 500 it was 13 to 1, and at the commencement of this Christian era it was 9 to 1. In the year 500 A. D. it was 18 to 1; 1100 it was 8 to 1; and in 1400 it was 11 to 1. In 1454 gold was only six times more valuable than the precious white metal, silver, and within the next hundred years two pounds of silver could be exchanged evenly for one of gold. In 1600 gold was again worth ten times as much as its paler brother. In 1755 gold was thirteen times more valuable than silver, just as it was 500 years B. C. At the beginning of the present century it had risen in value to a higher point than at any time since 500 A. D., being fifteen times more valuable than silver. In 1876 the ratio of silver to gold was twenty to one, and in 1886 it was at the highest point ever known, since which time it has gradually declined to twenty to one.

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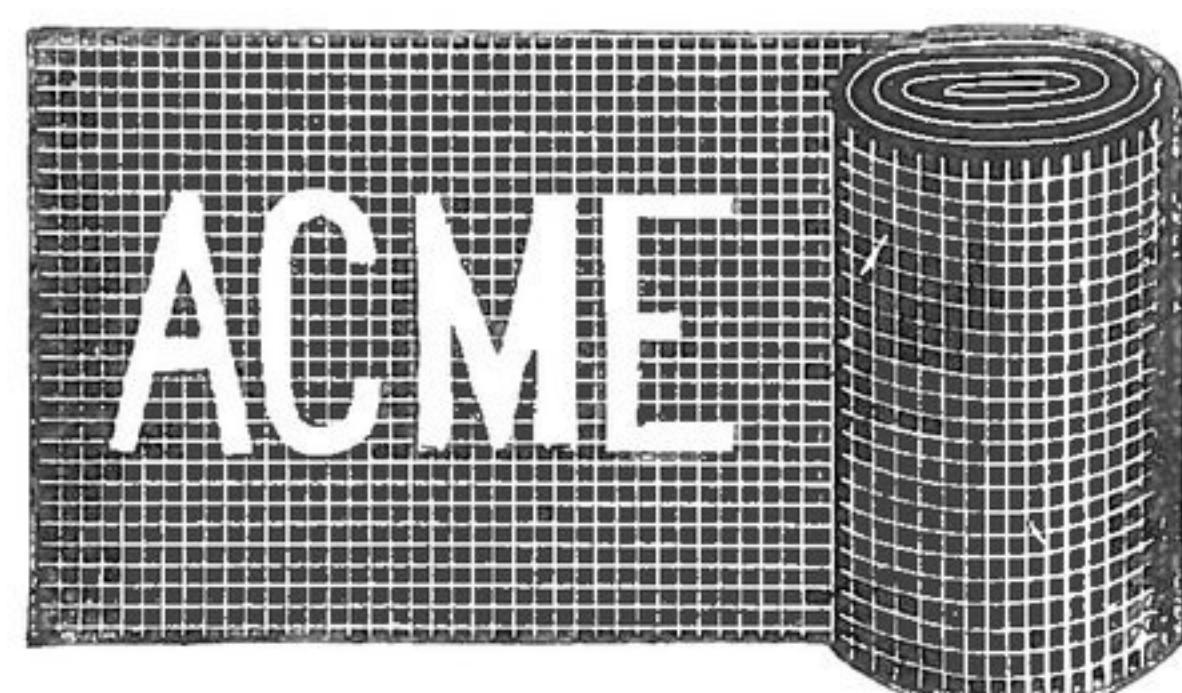
THE BEST AND CHEAPEST
CORN AND COB CRUSHER

IN THE WORLD.

All wearing parts cast of a steel mixture. Notice difference in construction. Most area where most work is done, where all other crushers have least area where most work is done. Low priced machinery is not the cheapest, considering durability and efficiency. Sent on 30 days' trial when satisfactory reference is furnished.

Please Send for Circulars.

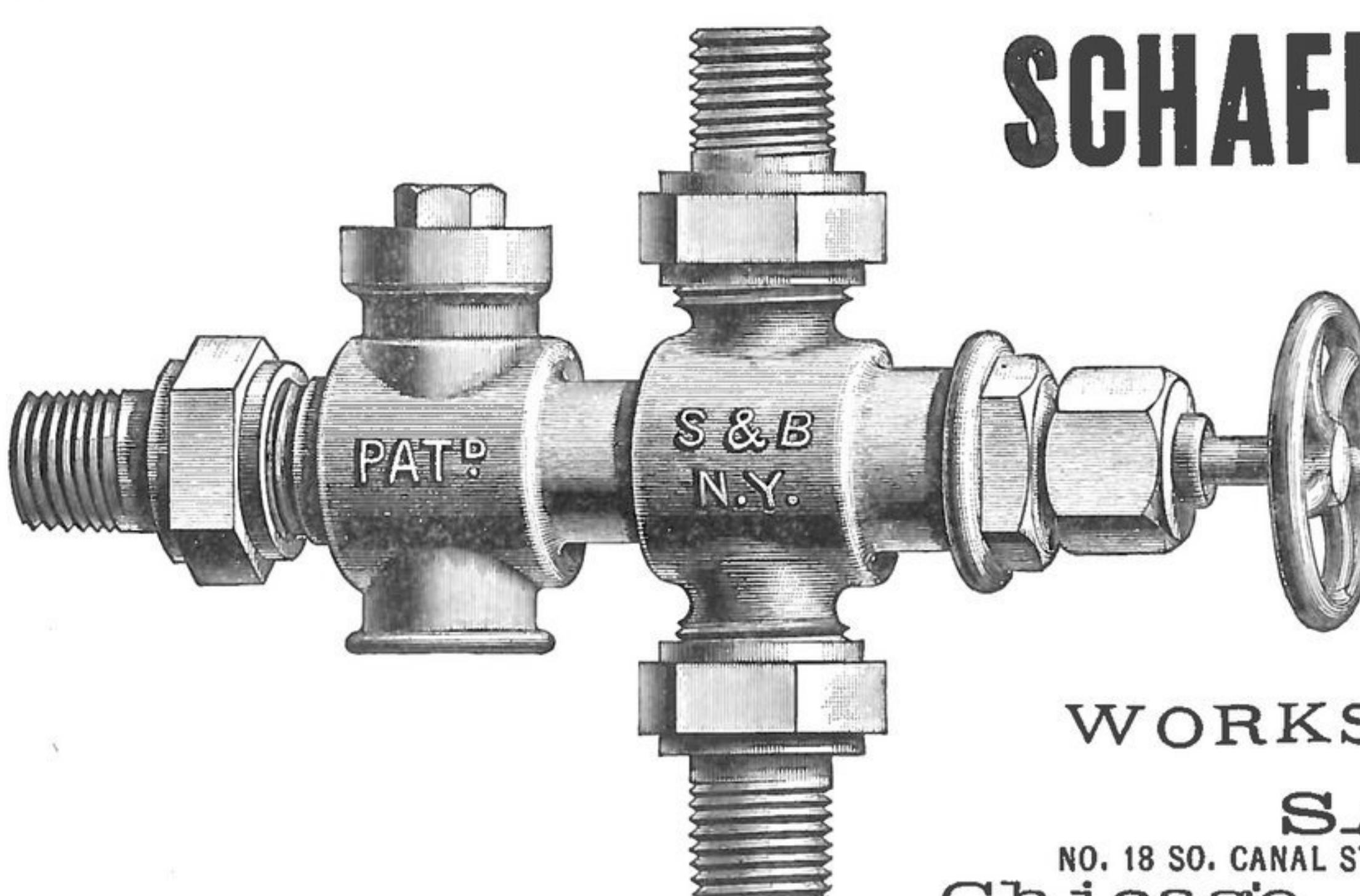
R. C. McCULLEY, LANCASTER, PENN.



WHEN YOU WANT
WIRE CLOTH
SEND TO
Brooklyn Wire Cloth Works,
107 JOHN STREET, NEW YORK.

PLEASE MENTION

“THE MILLING WORLD.”



SCHAFFER & BUDENBERG,

MANUFACTURERS OF—

Pressure Gauges for all Purposes

ENGINE COUNTERS AND REGISTERS.

IMPROVED RESTARTING INJECTORS
AND EXHAUST STEAM INJECTORS.

PYROMETER AND THERMOMETER, STEAM TRAPS, REDUCING VALVES, AND ENGINE AND BOILER APPLIANCES IN GENERAL.

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SALESROOMS:

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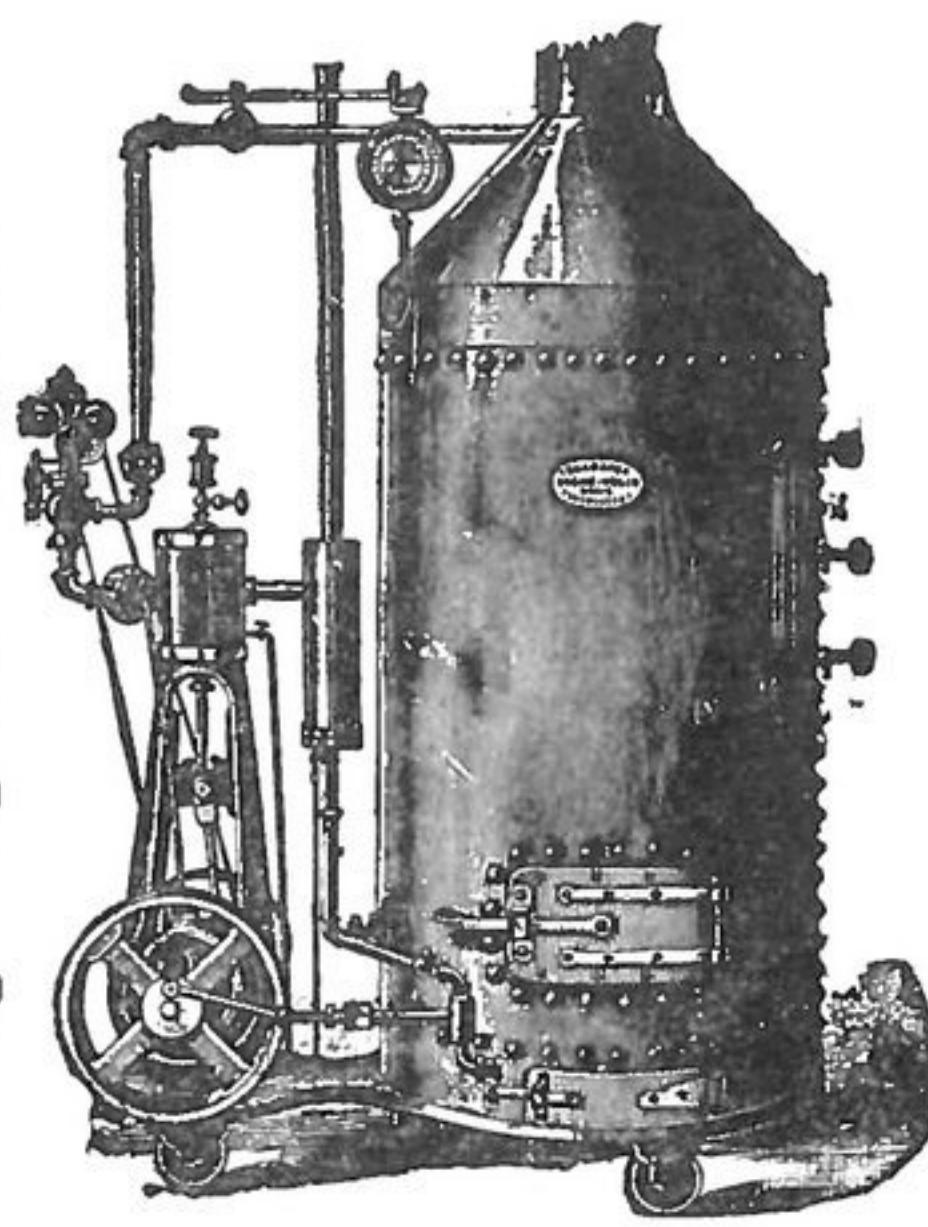
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TONAWANDA

ENGINE AND BOILER WORKS

A Large Assortment of Machinery.

The Best 6-Horse Power Semi-Portable Up-right Engine and Boiler Made.



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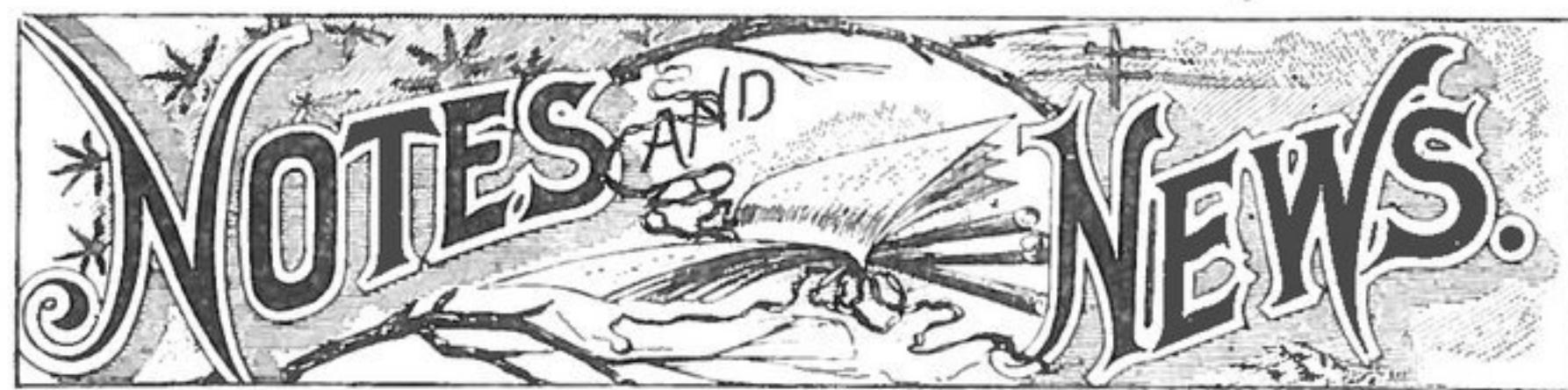
Tonawanda N. Y.

Sometimes Corrugated Iron is represented to be "just as good as" our Patent Edge Corrugation. While this is complimentary to our material, unfortunately it does not work out well in practice. The only Corrugated Iron that can be recommended for roofing is manufactured by

The Cincinnati Corrugating Co.

PIQUA, OHIO.

SPECIAL PRICE. GUARANTEED.



J. D. Hillman, miller, Ukiah, Cal., sells out.
 The Mammoth Spring, Ark., Roller Mill Co. build an elevator.
 The Gillian, Mo., elevator burned; loss \$20,000, without insurance.
 Jordan & Harris's grist-mill, Iuka, Miss., burned.
 The Champion Roller Mill, Falmouth, Ky., is rebuilding.
 A. D. Smith, Emory, Ala., wants grist-mill machinery.
 The Henderson Milling Co., Sheffield, Ala., propose to issue bonds for \$50,000.
 R. H. Wright, Durham, N. C., projects a stock company to build a flour and meal mill.
 The Tennessee Milling Co., Columbia, Tenn., changed style to the Bucks Milling Co.
 J. B. Blades' Holiday Roller Mill, near Paris, Mo., burned; loss \$10,000; insurance \$5,000.
 P. M. Mull's flour-mill, Mullgrove, N. C., burned; loss \$5,000; no insurance; fire incendiary.
 Johnson & Comstock's elevator, Binghamton, N. Y., burned; loss \$20,000; insurance \$15,000.
 The Merritt Mill Co., Morristown, Tenn., sold their plant for \$25,000 to Wolfe & Garrett, Read Bros. and others.
 Mead Bros.' flour-mill, North Jackson, O., was wrecked by a boiler explosion on July 23; three men were killed.
 Crabb & Reynold's elevator, Crawfordsville, Ind., burned; loss \$8,000; insurance \$6,000; the contents were insured for \$3,000.
 J. D. Thomas and others, Norfolk, Va., organized the Norfolk Milling Co., capital stock \$50,000, to build a 200-barrel roller flouring-mill.
 Brokenhead, Manitoba, capitalists have incorporated the Brokenhead Milling & Lumbering Co., capital stock \$6,000, to build a flour-mill.
 G. D. Campbell and others, Collinsville, Tex., incorporated the Farmers' Alliance Gin & Mill Association; they want machinery for grist-mill.
 Daniel Portnell and others, Silver Springs, Ark., incorporated the Silver Springs Milling Co., capital stock \$12,000, to build a mill; machinery is wanted.
 We are informed that The J. B. Allfree Co., of Indianapolis, Ind., are just getting out a new improved corn and feed mill, size 7x18, with three pairs of rolls, each pair above the other, to be entirely belt-driven. This is a feature that will be appreciated by the miller, as it will do away with the detestable noisy gears, some of the machines in the market making such a noise that you can not hear yourself talk without getting 40 or 50 feet away from the machine. The machine will be clean and perfectly tight and will be sold at a very reasonable price. The machine, we understand, has been thoroughly tested, and an illustration will appear in this paper as soon as they can be procured. We also understand that the firm are getting up a new wheat roller-mill, that will compete in price and workmanship with anything in the market. It will have a new improved tightener, by which the main belt can be taken up without interfering in any way with the differential. This is an improvement that will be appreciated by millers, as they can use their tightener with one operation and not have to let out the differential side.

A dispatch from Jamestown, N. D., dated July 21, says that it will be a startling piece of news to the wheat-growers of North Dakota to find out on the eve of harvest that no elevator in the State will store grain this year. This radical change in the handling of the crop has been kept as secret as possible. It was determined upon, it is said, soon after the law was passed this year which makes all public elevators and warehouses pay an annual licence of \$2.50 per 1,000 bushels of capacity. Nine-tenths of the crop of the State has been heretofore bought by the elevator companies upon the Duluth and Minneapolis quotations. A farmer could store his grain in these elevators for 15 days for nothing and keep it in

store as long as he desired to pay a small fee therefor. Now the elevators will refuse this, on the ground that they are not public elevators, and the farmer who is mortgaged to the ears will this year be compelled to sell his crop at whatever price the company chooses to allow him. In most cases this will leave him penniless for the winter. The law was supposed to be a reasonable one, and was in the nature of a tax not so easy to evade as the old tax law has proved, but the companies, to evade it, will resort to this sweeping change, which will bring misery on most of the wheat-growers of this State, a class of men having from 50 to 500 acres in grain, which is all they have in the world, and which now promises the first actual return for their labor in three years. By this plan of forcing private buyers out of the small stations and agreeing upon a price, the principal elevators of the State will have, as in the past, absolute control of the enormous crop now heading out. This crop will be so large that the railroad companies have stated that all the railroads combined can not furnish cars to move it one-tenth as fast as required. If the elevators decline to store it, the confusion and dismay that will result will be something unparalleled. Of course the demand for cars will be immensely increased. Farmers, having had no notice of the elevators' action, will not have time to build bins or warehouses. They have, as a rule, no granaries now and can not get money to buy lumber for new ones to store their own grain in. Many of them bought seed wheat of the elevator syndicate organized by Governor Miller last spring. This wheat was charged for at \$1 a bushel, and a lien was taken on the crop, which prevents the farmer from doing anything with it except to turn it over to the company as soon as threshed. The plan of the combine will result in an agricultural panic for this section of this State.

BOOKS AND PAMPHLETS.

Good Housekeeping for July 19 has a feature of special interest to many in its description of the co-operative dining arrangement which is being so successfully carried on at "The Roby," Decatur, Ill. The article in question is by Miss Fannie E. Fuller, the secretary of the institution, and may therefore be relied upon by those interested in the study of modern household problems. Clark W. Bryan & Co., Springfield, Mass., are the publishers of this interesting family magazine, which is issued fortnightly at \$2.50 a year, or 10 cents a copy.

Scribner's Magazine for August will appeal powerfully to every lover of fine literature and artistic engraving. The contents include: *Exquisites of D'Artagnan's Time*. Frontispiece. *The Paris of the Three Musketeers*; by E. H. and E. W. Blesfield. *A Dialogue*; by Andrew Lang. *Galleher, A Newspaper Story*; by Richard Harding Davis. *Sergeant Gore*; by LeRoy Armstrong. *The Sisters' Tragedy*, A. D. 1670; by Thomas Bailey Aldrich. *Jerry*, Part First, Chapters XIV.-XV.; Part Second, Chapters I.-II. (To be continued through the year.) *The Basket of Anita*; by Grace Ellery Channing. *How Stanley wrote His Book*; by Edward Marston. *The Season's Boon*; by G. Melville Upton. *Decline and Fall*; by Annie Eliot. *Renunciation*; by Emily Dickinson. *A New England Ingénue*; by John Seymour Wood. *A Sentimental Annex*; by H. C. Bunner. *The Point of View*, *The Tyranny of Things*, *An Obsolete Distinction*, *The Passing of a Week*. Address Charles Scribner's Sons, 743 and 745 Broadway, New York, N. Y.

At the time of General Fremont's death he was engaged upon the manuscript of a paper for *The Century's* forthcoming series on the California Gold Hunters. It was to be entitled "Finding Paths to California," and was not only to deal with the several exploring expeditions, but to narrate the writer's intimate connection with the events which led to the conquest and occupation of the territory. The work will be promptly continued by Mrs. Fremont. A first draft of the article had been made, and the subject had been so recently and closely discussed by General and Mrs. Fremont that she will have no trouble in completing the manuscript, for which she had already written an introduction, as well as a supplement describing her life at Monterey in 1849. A fine portrait of General Fremont from a daguerreotype of '49 or '50 will appear in the September number of *The Century*, along with portraits of Commodores Sloat and Stockton, "Duke" Gwin, and Governor Burnett, in an article giving an account of "How California Came into the Union."



W.A.BINGHAM,
 MANUFACTURER OF
FLOUR SACKS.

178 Duane Street,

New York



THE BEST ARE THE CHEAPEST.

MILLERS' FLOUR SACKS A SPECIALTY.

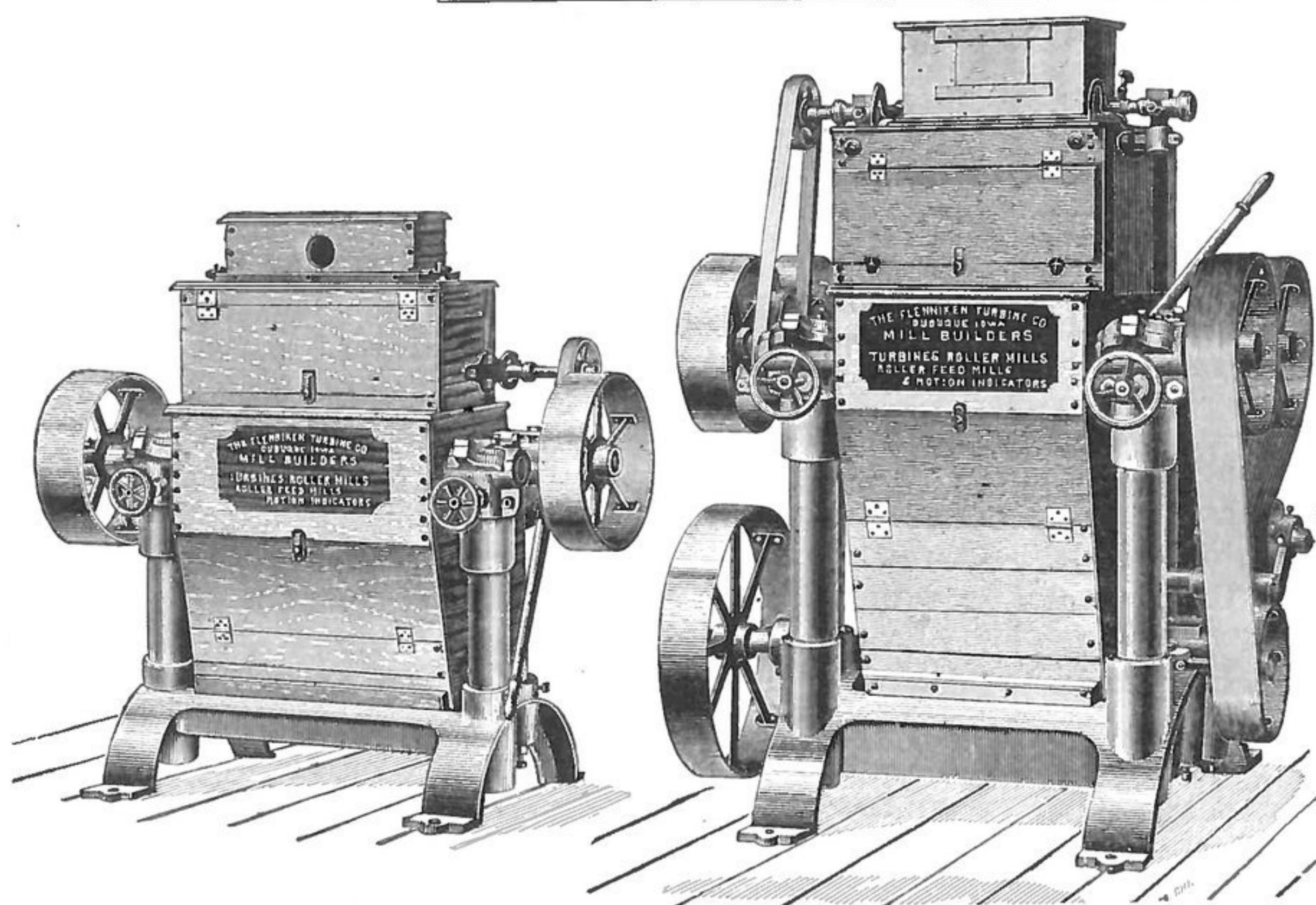
THE PATRONAGE of the MILLING TRADE is MOST RESPECTFULLY SOLICITED.

ONE REDUCTION TO THE FRONT!

*Ye jolly millers, one and all,
Who granulate with burrs,*

A Moses has Come to Deliver You from Egypt. Cease Trying to Make Bricks without Straw. The Red Sea of Expense Has Been Divided.

The Wilderness of Reductions has Been Shortened. There is Manna in Abundance for Those Who Believe. Listen to the Glad Tidings of Great Joy!



ONE REDUCTION ON ROLLS IS A SUCCESS! Two years of experience in a dozen States, with all kinds of Wheat and diversified climates, has justified us in recommending its adoption in place of burrs in each and every case, whether for grinding Wheat, Rye or Buckwheat. We have perfected Roller Mills, Bolts and Scalpers peculiarly adapted to the wants of Small Mills, and all our machines *infringe no patents*, and no claims are made that they do.

Having consummated a bargain with **MR. O. C. RITTER**, the author and patentee of **One Reduction**, which gives us the *exclusive right* to construct mills under his patents, our patrons in the future will receive a license from Mr. Ritter.

SPECIALTIES! { Graham Roller Mills, Round Reels and Scalpers, Sectional Round Reels, Grain Separators, Motion Indicators. Before buying any of these machines send for our prices and descriptive circulars. } **SPECIALTIES!**
Second-Hand Machinery, and Bargains in Every Line.

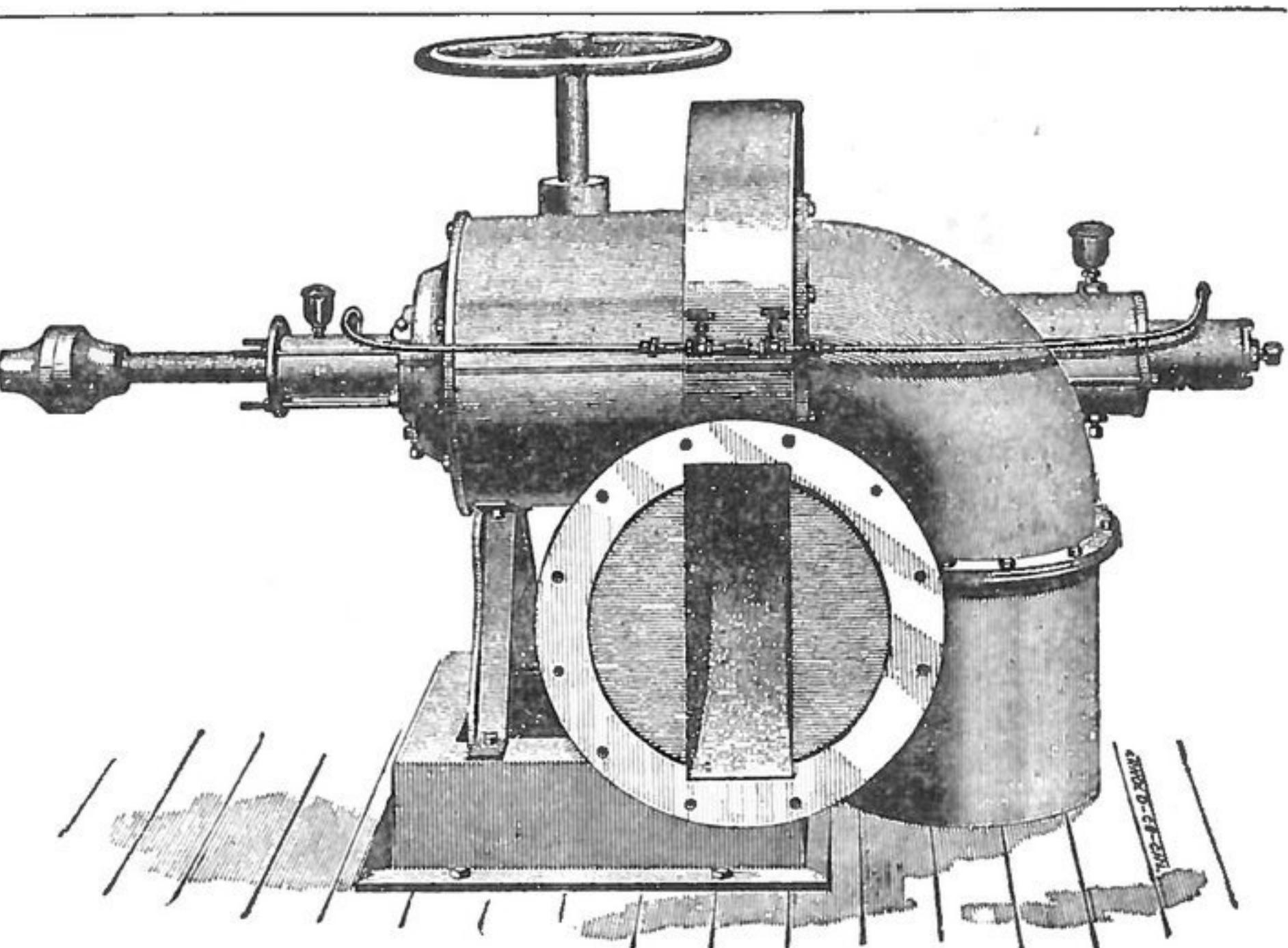
SEND FOR CATALOGUE OF

The Best Turbines!

VERTICAL OR HORIZONTAL,

With or Without Iron Flumes,

—BUILT BY THE—



Flenniken Turbine Co.

DUBUQUE, - IOWA.

EUROPEAN ECHOES.

SAYS the London "Millers' Gazette" of July 7: "If reports from Canada thus early can be credited, Manitoba will this year have a bigger crop than ever before, the increase in acreage being over 20 per cent. The area under wheat is said to be 870,000 acres, and that under oats 360,000 acres. We shall probably soon receive the usual estimates of wheat for export from Manitoba, which will doubtless prove, as usual, to be gross exaggerations."

A FRENCH letter dated July 17 says: A fortnight ago we had in sight a magnificent large crop of wheat, estimated to yield 328,000,000 bushels to 352,000,000 bushels. The last ten days we have had a succession of storms of rain and wind from the southwest, which laid many fields in Brittany and Normandy, also around and east of Paris; the south and north escaped this bad weather. However, the damage is more apparent than real, as many farmers and millers from the above districts assure me. They say, first of all, that all the wheat grown after beet-root, and the area is considerable, stands upright. As to the "laid" fields, it is simply a question of future weather, as last year quite as many, if not more, fields were knocked down, three weeks sooner, that is, at a more critical period than the present. Nevertheless, in consequence of high farming, the crops gave good returns. Therefore, with tolerably favorable weather until harvest, dry and not too hot, it is expected that our crop will be at least as large as that of last year, say 304,000,000 bushels to 316,000,000 bushels.

AN English summary of July 8 says: The Continent has bought freely. Accounts of the French crop have become less satisfactory day by day, and seeing that this crop is, after the American, the most important of all, the present anxiety is only reasonable. South of parallel 47 harvesting is now in full swing, and the swarth is silently falling northward hour by hour. From Bordeaux to Odessa new wheat is ready at hand, and only a few weeks of settled fine weather are now wanting to insure bountiful crops throughout Europe. Merchants are under the impression that millers are low in stock, and as they can not replace either in America, India or Russia very readily, the latter may find them for the next six weeks less complacent than usual. America has practically completed her wheat harvest and finds it better in quality than for some years; in quantity it appears like showing a deficiency compared with the official returns of last season of 64,000,000 bushels to 72,000,000 bushels. The Indian crop, according to latest reports, is expected to yield about as well as last year, and is likely, therefore, to afford a surplus for exports of about 24,000,000 bushels. The total exports during the Indian cereal year 1889-90 were 25,600,000 bushels, compared with 32,800,000 bushels two years ago. Russia, it is likely, has grown about 72,000,000 bushels more than last year, but will carry over from her late crop probably 56,000,000 bushels less than she did a year ago. So, roughly, the position of five great crops of the world resolves itself into America 64,000,000 bushels to 72,000,000 bushels less, but 16,000,000 bushels to 24,000,000 bushels heavier reserves; Russia, 8,000,000 bushels to 16,000,000 bushels more (net); India, about the same as last year; France, ditto; Hungary, 32,000,000 bushels to 40,000,000 bushels more, but lighter old stocks.

FIRE PROOF LATHING.

As the season opens, the inquiries for the metallic lath, manufactured by the Cincinnati Corrugating Company, of Piqua, Ohio, increase, showing that it is still growing in popularity. Especially do contractors and workmen find advantages over all other styles in the matter of putting it on. Its rigidity gives it a great advantage over all other forms of wire cloth. It forms a strong bracing to the building and can be used over many open spaces where other styles would not be effective. This lath generally comes in pieces about four inches wide for the narrowest, to about 12

inches wide for the widest. It runs from two to eight feet in length, as circumstances require. By the use of this lath very smooth and solid walls and ceilings are secured. As there is no shrinkage or expansion, there can be no cracks. It can be easily adapted to curved surfaces for such work as groined arches, coves and cornices. It is also the best article for fire-proofing and for covering iron girders, posts and beams. The protection secured by its use is equal to that of tile, while its weight is not over one-eighth as much. At the same time it costs only one-fourth as much. Steam-fitters find this lath especially adapted to their needs, both for covering around registers and about air-flues, and for use in partitions. It is extensively employed in covering hot-air pipes and boilers, and is suitable as a base on which to apply plaster-of-paris, adamant, asbestos or mortar of any kind. This lath requires no cross-furring, even with usually wide spans. It is economical of plaster, and the mortar adheres firmly to the surface. This with the perforations makes a key the strength of which is unequalled. Further, this lath is the only kind that can be put in place by a workingman alone. The makers would be pleased to send samples and full information upon application. Address the Cincinnati Corrugating Company, Piqua, Ohio.

MILLING PATENTS.

Among the patents granted July 15, 1890, are the following:

Sidney W. Chase, Wolcottville, Ind., No. 432,117, a grain-separator, comprising the combination of a stationary screen extending upwardly and rearwardly from the concave, a walking-rake arranged above said screen, the longitudinal guards arranged between said screen and the rake-heads, an endless carrier to convey the grain and chaff passing through the stationary screen to the shaking-screen, and an endless carrier arranged above the latter to convey the straw passing over the stationary screen to the tail end of the machine.

Alexander McDougall, Duluth, Minn., No. 432,145, an apparatus for cooling and drying grain, consisting of an elevator bin having a number of perforated partitions within the bin, each partition being made of some absorbent material, a number of partitions arranged at right angles to the perforated partitions so as to divide the bin into a series of compartments having air-spaces between them, an inclined bottom for each compartment, openings in the front wall of the bin and connecting with each compartment, a flat hopper secured to the front wall of the elevator-bin and communicating with said compartments through the openings, a valve in the hopper, a hopper at the lower end of the elevator-bin communicating with the air-space and also having a valve therein, and a sliding rack at the top of the bin and adapted to close or open the upper ends of the air-chambers.

Elias W. Hoover, Chicago, Ill., No. 432,200, a dust-arrester.

Chas. A. Wever, Clayton, Ill., No. 432,347, a grain-measuring device.

Abraham N. Wolf, Allentown, Pa., No. 432,350, a dust-collector.

Ernest E. Chapman, Doylestown, Pa., No. 432,370, a grain-separator.

Chas. E. Henshaw, Medford, Wis., No. 432,488, a middlings-purifier.

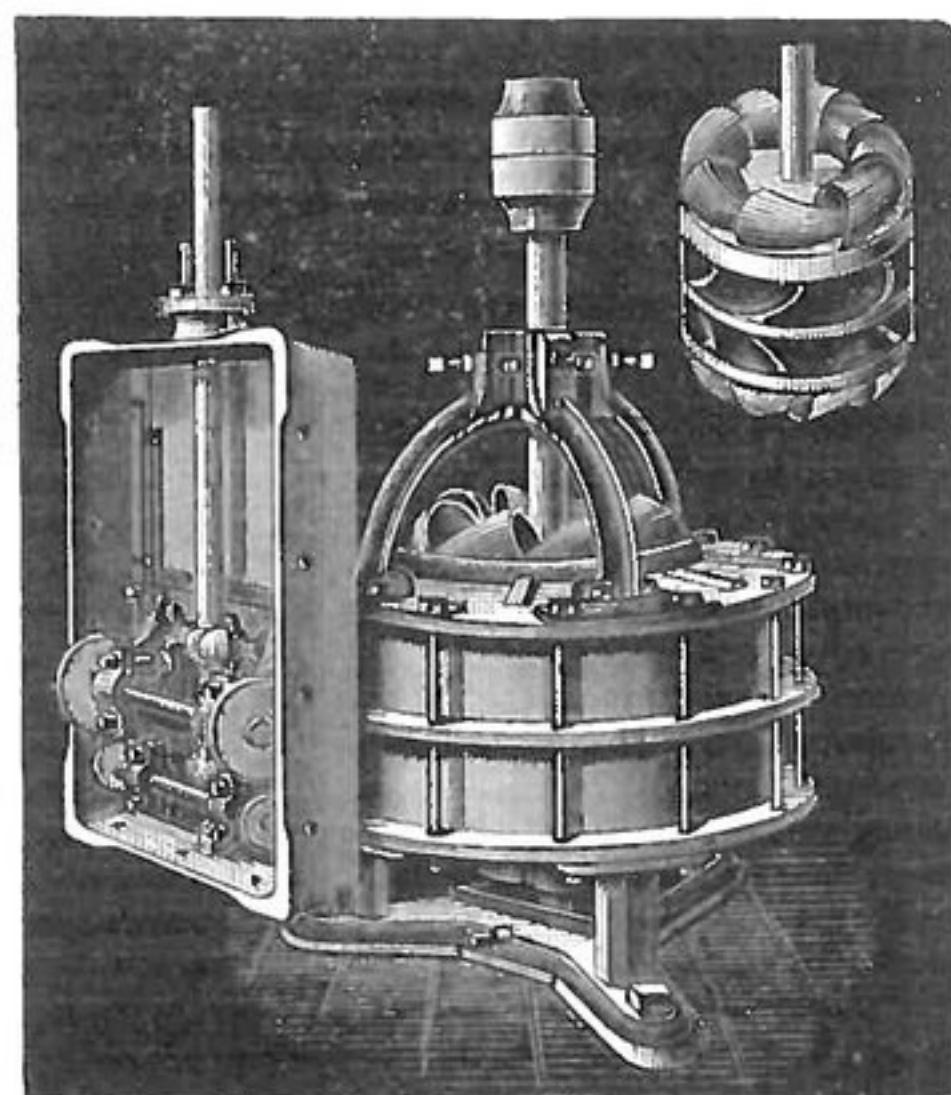
A NEW METHOD OF TREATING DISEASE.

HOSPITAL REMEDIES.

What are they? There is a new departure in the treatment of disease. It consists in the collection of the specifics used by noted specialists of Europe and America, and bringing them within the reach of all. For instance the treatment pursued by special physicians who treat indigestion, stomach and liver troubles only, was obtained and prepared. The treatment of other physicians, celebrated for curing catarrh was procured, and so on till these incomparable cures now include disease of the lungs, kidneys, female weakness, rheumatism and nervous debility.

This new method of "one remedy for one disease" must appeal to the common sense of all sufferers, many of whom have experienced the ill effects, and thoroughly realize the absurdity of the claims of Patent Medicines which are guaranteed to cure every ill out of a single bottle, and the use of which, as statistics prove, has ruined more stomachs than alcohol. A circular describing these new remedies is sent free on receipt of stamp to pay postage by Hospital Remedy Company, Toronto, Canada, sole proprietors.

LITTLE GIANT WATER WHEEL



—MANUFACTURED BY—

MUNSON BROS.

UTICA, - - N. Y.

Simple in Construction, Durable & Cheap.

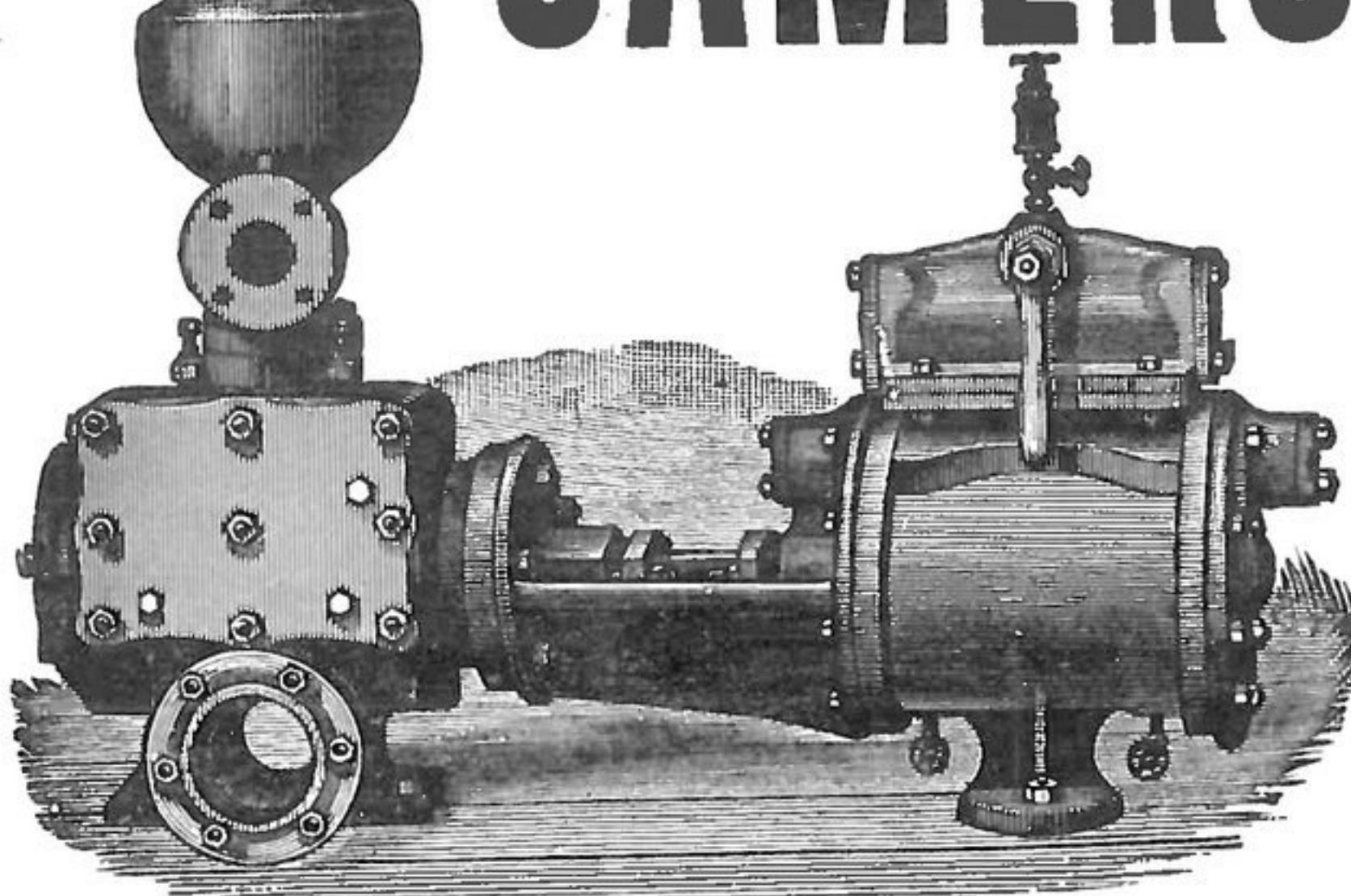
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CAMERON STEAM PUMP

THE STANDARD OF EXCELLENCE.

SIMPLE! COMPACT! DURABLE!
"NO OUTSIDE VALVE GEAR."

Steam, Air & Vacuum Pumps in Every Variety

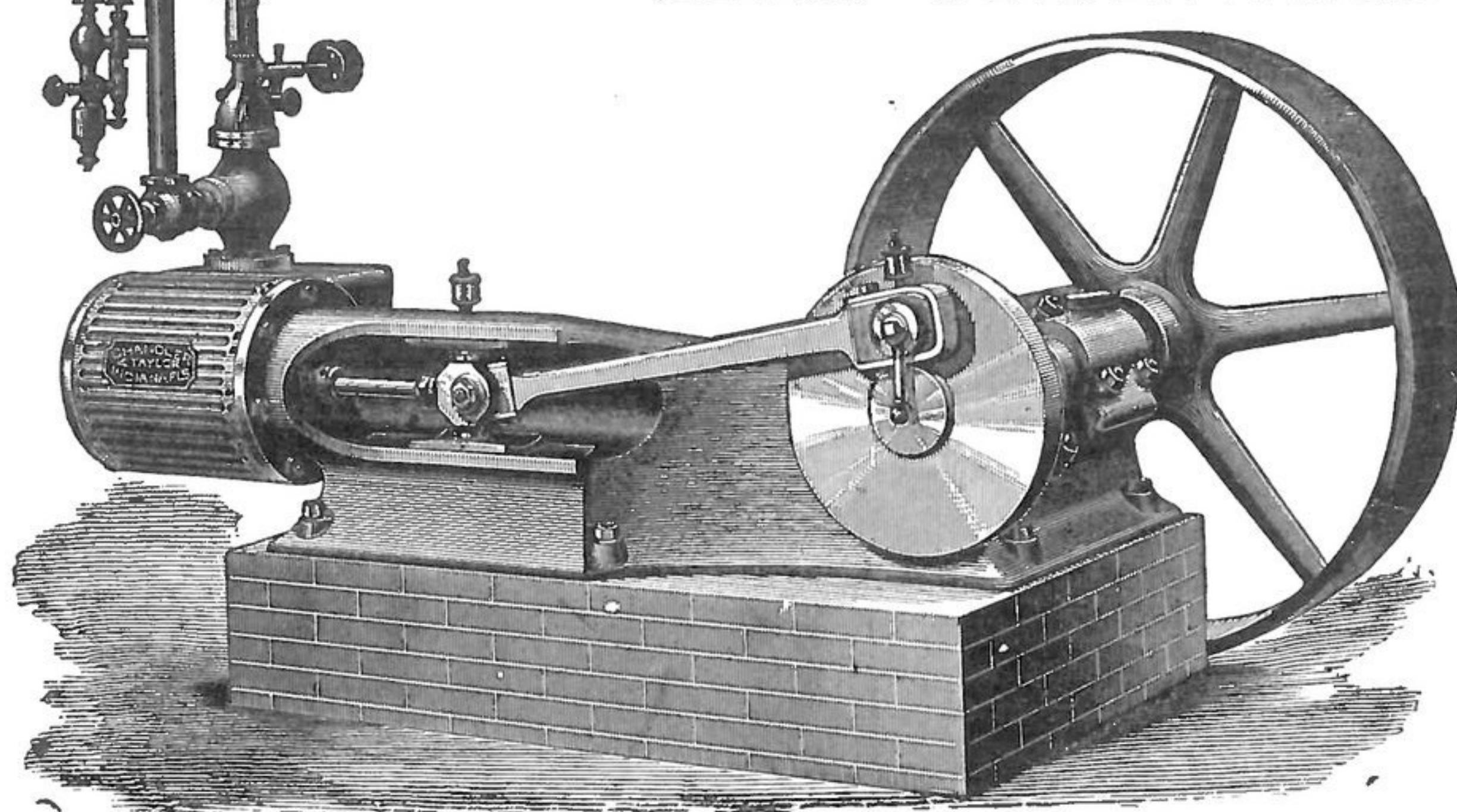


FOR ILLUSTRATED CATALOGUE ADDRESS

THE A.S. CAMERON STEAM PUMP WORKS

Foot of East 28d Street, - - New York.

SELF-CONTAINED STEAM ENGINES

Stationary or
Semi-Portable.High Standard Maintained.
Prices Greatly Reduced.WRITE FOR NEW ILLUSTRATED
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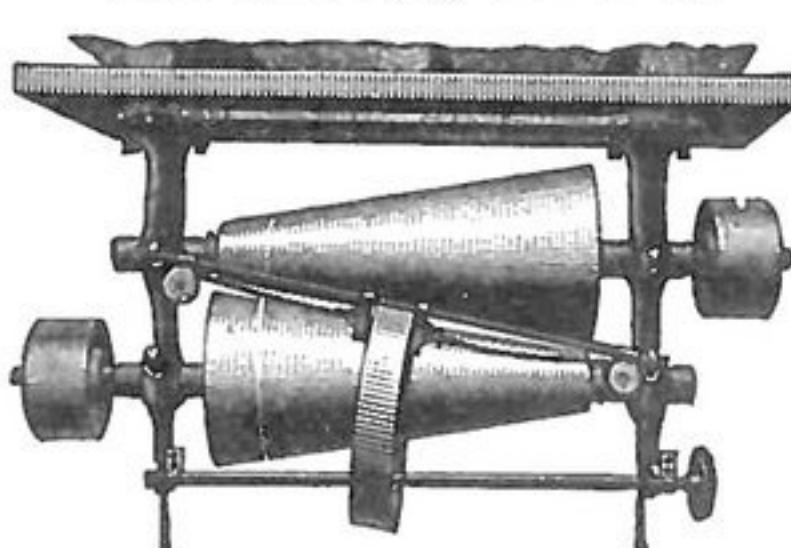
Chandler & Taylor Co.

Indianapolis, Ind.

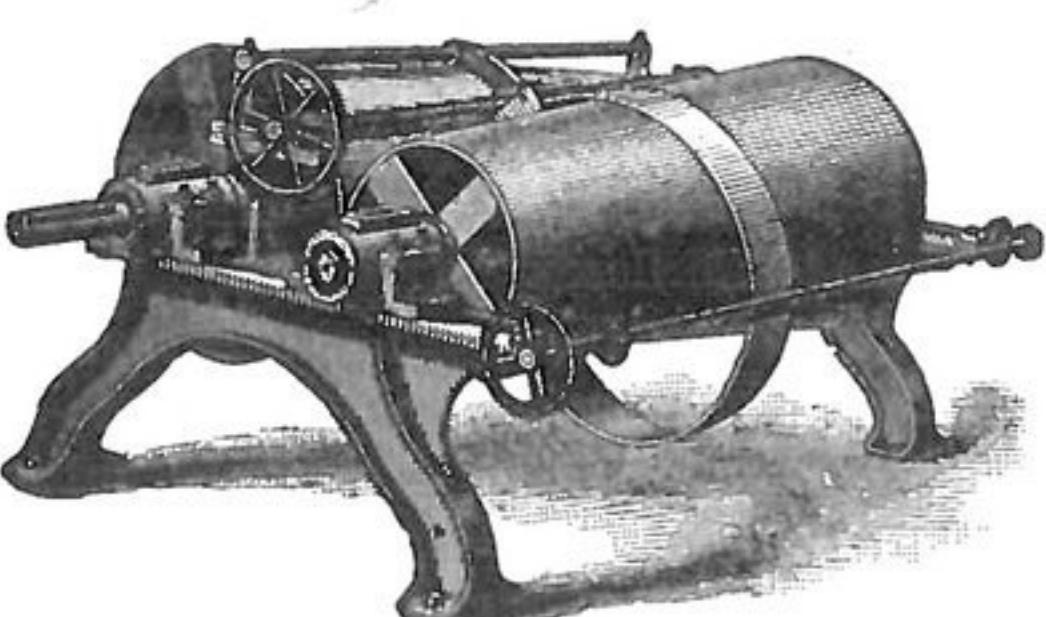
Engines, Saw-Mills and Drain Tile
Machinery a Specialty.

THE EVANS FRICTION CONE & FRICTIONAL GEARING

“PATENTED.”



This cut represents a set of hanging cone pulleys. This pattern is intended for that class of machinery that stops and starts at the same speed, and at the same time be able to change the speed more or less while running. These cones are also fitted with a governor where a steady motion is required and the initial power is fluctuating. All sizes made from $\frac{1}{2}$ Horse Power to 50 Horse Power. SEND FOR ILLUSTRATED CATALOGUE.



EVANS FRICTION CONE CO., 85 Water St., BOSTON.





OFFICE OF THE MILLING WORLD,
BUFFALO, N. Y., July 26, 1890.

Friday of last week brought stronger markets, on unsettled weather in Europe and unfavorable wheat, corn and oats weather in the western and northwestern States. July wheat in New York closed at 95½c., with receipts 102,000, clearances 16,000, and options 880,000 bushels. July corn closed at 44½c., with receipts 95,000, clearances 105,000, and options 1,072,000 bushels. July oats closed at 39½c., with receipts 55,000, clearances 27,000, and options 165,000 bushels. Wheat flour was in good home and export demand, and receipts included 8,000 and exports 4,000 packages. Millers raised limits on some lines. The minor lines were featureless.

Saturday brought still stronger and higher markets on foreign buying, on wet weather in Europe, and on bad northwestern wheat-crop news. July wheat closed at 96½c., with receipts 172,000, clearances 48,132, and options 1,960,000 bushels. The bulls held the field all day on the weather reports. July corn closed at 44½c., with receipts 166,900, and options 520,000 bushels. July oats closed at 40c., with receipts 28,000, and options 110,000 bushels. Wheat flour was very firm, with higher prices asked for some specialties. Exporters took some fair bills. The minor lines were stronger generally.

Monday brought a reaction on better weather in the West and Northwest, although European reports gave Great Britain very unsettled weather. July wheat closed at 96c., with receipts 210,720, exports 199,605, and options 1,640,000 bushels. July corn closed at 44c., with receipts 298,000, exports 352,784, and options 784,000. July oats closed at 39½c., with small trading and options only 150,000 bushels. Wheat flour was active, with good export sales for the West Indies. Exporters were not busy, claiming that improved weather in Europe calls for lower figures on flour. Receipts included 90,547 and exports 18,922 barrels. The minor lines were quiet and generally strong. The visible supply in the United States and Canada was:

1890.	1889.	1888.
July 19.	July 20.	July 21.
Wheat.....	18,557,191	12,194,470
Corn.....	13,128,101	7,990,587
Oats.....	3,159,799	4,673,383
Rye.....	513,487	821,064
Barley.....	406,608	377,605
		151,420

Tuesday brought weaker opening, on lack of crop and weather news, but the bears could not keep prices down, especially for wheat, which was in good export demand. July wheat closed at 96½c., with receipts 348,268, exports 91,040, and options 1,784,000 bushels. The amount on passage showed a decrease of 1,152,000 bushels, which helped to strengthen prices. July corn closed at 44c., with receipts 432,327, exports 140,378, and options 736,000 bushels. July oats closed at 39c., with receipts 40,445, exports 13,148, and options 200,000 bushels. Rye grain was higher on good export demand, and ruled as follows: Western, full loads, 58½@60c.; State 59½@61c.; Canada 59@70c.; track car lots 56@58c. Mill-feed was stronger and in good request. Quoted: 40, 60 and 80-lbs., 70@72½c. as to mills and 75@80c. for 100-lbs.

Wheat flour was unchanged, though it was more difficult to get full prices than on Monday, as the trade had supplied its immediate wants and was holding off in view of the higher prices asked by the Western mills for winters and spring clears, while spring patents were still neglected, and only a small jobbing demand would be secured without concessions, which millers would not make. City mills were in a little better demand on account of the scarcity

of Western winters on the spot and the advance asked to arrive. Among the sales were winter wheat straights in lots, spot and to arrive, \$4.50@4.75, and very fancy, \$4.80@4.85; clear winters in lots at \$4.25, or 5 cents higher, with the range \$4.15@4.50; spring patents in lots at \$4.90@5.30; white wheat Michigan in lines at \$4.60; city mills, patents and lower grades, for the United Kingdom, on p. t., quoted about \$4.75@5.10 for common to choice in sacks; bags extra No. 2 winters, \$3.05; city mills for the West Indies in lots at \$4.45@4.75, chiefly \$4.50@4.60 as to brands; fine winter \$2.05; patent winters lots \$4.90@5.15; fancy \$5.20. Receipts included 4,890 sacks and 22,368 barrels, and exports 4,811 sacks and 3,114 barrels.

Corn products were nominally as follows; Brandywine \$2.65; yellow granulated \$2.85; white do \$3.00 in barrels; city coarse in bags \$4@86c.; fine yellow 95c. @ \$1.00; fine white \$1.00@1.05; Southern coarse to granulated 85c. @1.30. Rye flour was quiet at \$3.00@3.25.

Wednesday brought higher, stronger and more active markets, on good foreign demand, light receipts at Atlantic ports, and bulling in the West. July wheat closed at 97½c., with receipts 166,745, exports 27,338, and options 1,808,000 bushels. England reported wet weather and lower estimates on the wheat yield, and Russia sent reports of serious damage to wheat. July corn closed at 45½c., with receipts 136,060, exports 281,794, and options 2,464,000 bushels. A corn "ring" was said to be formed or forming. July oats closed at 40c., with receipts 43,463, exports 7,384, and options 480,000 bushels. Wheat flour ruled firm and showed a tendency to advance, although New York was 12 to 25 cents above exporters' figures. Receipts were 4,595 sacks and 19,617 barrels, and exports 16,545 sacks and 4,769 barrels. The dealers assume that the consolidation of the warehouse business of the New York Central, West Shore and allied lines in New York, which took effect July 1, means that inducements will be offered to western flour-mills to make New York the one great flour depot of the United States. All the minor lines were quiet.

Thursday was a day of strong and active markets. July wheat closed at 99c., with receipts 77,000, exports 54,000, spot sales 312,000, and options 4,256,000 bushels. July corn closed at 46½c., with receipts 15,000, spot sales 212,000, exports 356,000, and options 2,560,000 bushels. July oats closed at 40c., with receipts 21,000, spot sales 91,000, and options 356,000 bushels. Rye grain was strong at 60c. Malt was dull at 77½@90c. for Canada, 67½@70c. for 2-rowed State, and 72½@77½c. for 5-rowed State.

Wheat flour was strong and active. Receipts were 11,000 and sales 46,000 packages. Sales were made at the following quotations: Low extras \$2.50@3.15; city mills \$4.50@4.75; city mill patents \$4.85@5.25; winter wheat low grades \$3.50@3.15; fair to fancy \$3.25@4.85; patents \$4.50@5.35; Minnesota clear \$3.75@4.60; straight \$3.85@4.90; Minnesota straight patents \$4.40@5.40; rye mixtures \$3.65@4.25; superfine \$2.15@2.90. The minor lines were firm and active. The Minneapolis output the past week was 123,200 barrels, and there is talk of curtailing production. For the last ten months the Minneapolis output was 887,000 barrels above that of the same months last year.

A London, Ontario, Canada, dispatch of July 23 says: A meeting of the Millers' Western Local Association was held here to-day, and the following resolution was passed unanimously: "That this meeting of flour-millers for the Counties of Middlesex, Elgin, Essex, Kent and Lambton, having discussed the action of the Government in withdrawing the order-in-Council making the 1-16 bushel measure a legal standard for testing the gravity weight of grain, but at the same permitting grain buyers to use the same to inform their own minds of its value, and having been informed by the secretary of the Dominion Millers' Association that the grain inspector in Toronto still intends to continue

the small tester in ascertaining the standard of car loads and cargoes of grain, and in deciding whether such cargoes are number one, two, or three grade; therefore, be it resolved, that this meeting of millers will continue to buy by tester, using their small tester, to inform their own minds of the value of wheat, both farmers' loads and car lots, and in any dispute between buyer and seller about the weight of any contract lots, then a peck or half-bushel measure will be used so as legally to decide the same."

BUFFALO MARKETS.

The grain markets have all boomed. Wheat rose here 1½@1½c., corn came up a full cent, and oats were firmer. In New York August wheat rose 1¾c., spot corn over a cent. In Chicago prices of August wheat rose from 88½c to 90c, spot corn rose ½c and oats ¾c. At Detroit No. 2 red wheat rose from 69½c to 91c, and at Duluth hard wheat rose an even 2 cents. The cause of the bullish movement was the bad crop report from the Northwest, aided by shorts covering in Chicago and elsewhere. Flour was reported firm and unchanged everywhere. In the English markets American spring wheat made a small advance, while California and home-grown wheats remained steady. The situation indicates higher prices in the future.

FLOUR MARKET.

	Spring Wheat.	Winter Wheat.
Patents.....	\$5.75@6.00	Patents..... \$5.25@5.75
Straight.....	4.75@5.00	Straight.... 4.75@5.00
Bakers.....	4.25@4.75	Clear..... 4.25@4.75
Red Dog.....	2.00@3.00	Low grades.... 3.00@4.25
Rye flour.....	3.50@—	Graham..... 4.50@—

Retail prices 50c per bbl above these quotations. **WHEAT**—The market opened strong at yesterday's close, and closed quite a little higher. Sales were reported of 8,000 bu spot No. 1 hard at 98½c, but at the close it was held at an even \$1.00. Sales were made of 34,000 bu No. 1 Northern c. i. f. at 95½c, 10,000 bu do c. i. f. at 96½c, and 8,000 bu to arrive at 96½c. This sort closed at 99c asked. Early in the day some old No. 2 red wheat sold at 92½c, and new do at 89c, but at the close 91c was asked for the latter. **CORN**—There was another rise in prices to-day, and at the close the asking prices were 45@45½c for No. 2 yellow, 44½@45c for No. 3 yellow, 43½@44½c for No. 2 corn, and 43½@43½c for No. 3 corn. **OATS**—No. 2 white sold early at 41c for 14,000 bu and were held ½c higher at the close. No. 2 mixed closed at 38½c asked. **RYE**—The market is entirely nominal at 53@54c for No. 2. **OATMEAL**—Akron, \$4.95; Western, \$4.95 per bbl; rolled oats, in cases, 72 lbs, \$3.10. **CORNMEAL**—Coarse, 95@1.10; fine, \$1.00@1.05; granulated \$1.50 per cwt. **MILL-FEED**—City-ground coarse winter, \$12.75@13.00 per ton; fine do. \$12.75@13.00; finished winter middlings, \$14.00@15.00; coarse spring do, \$12.25@12.75.

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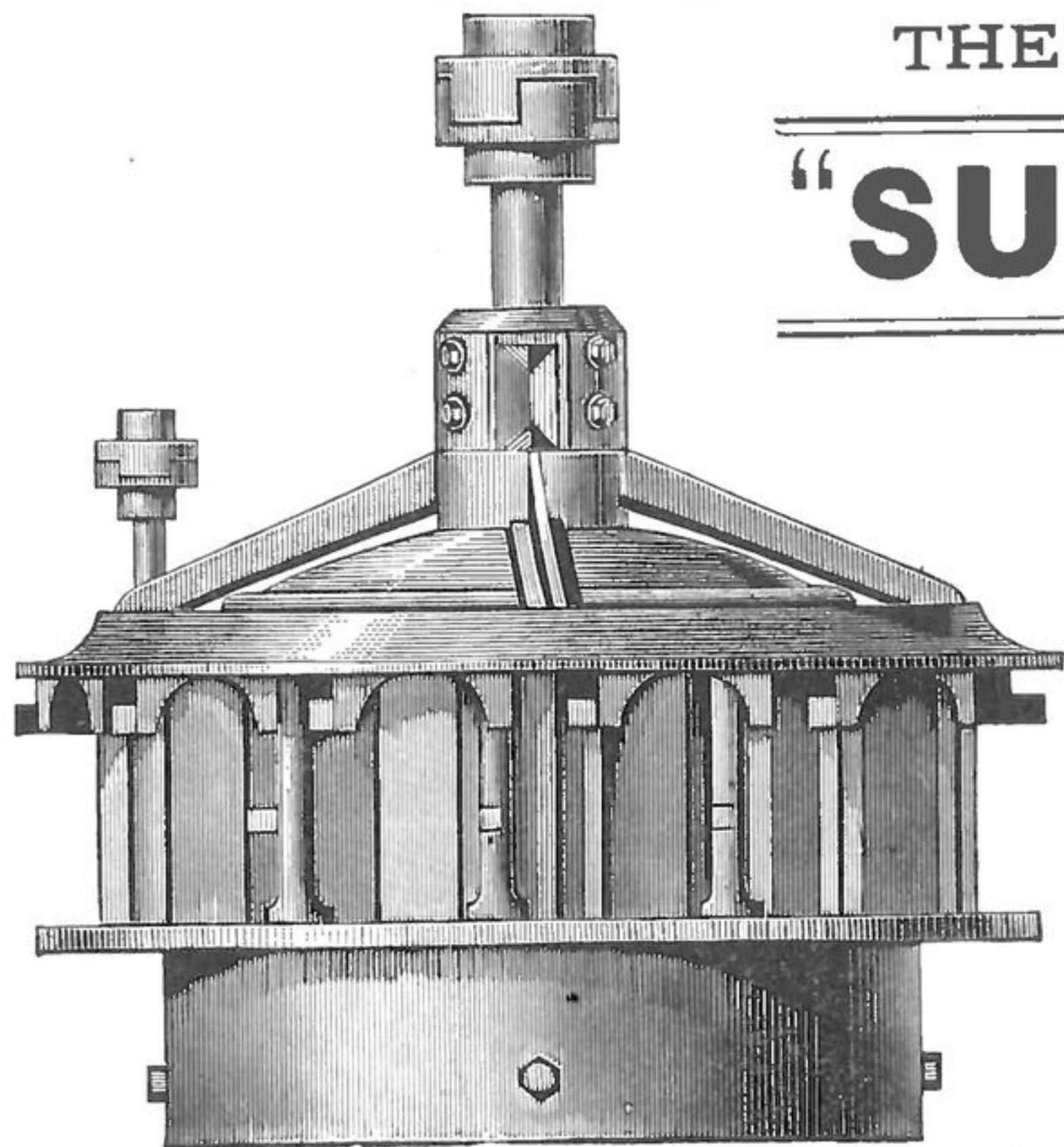
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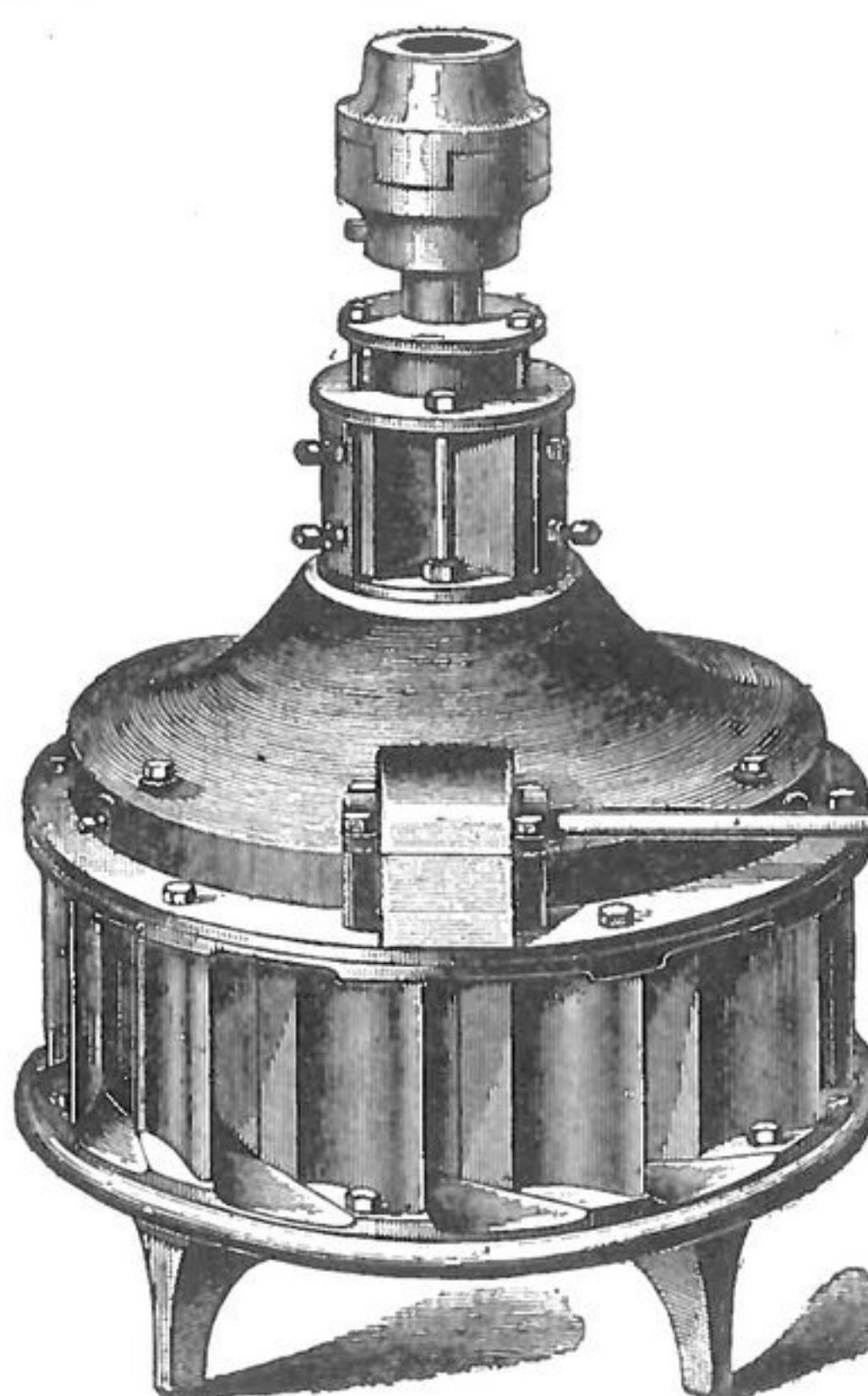
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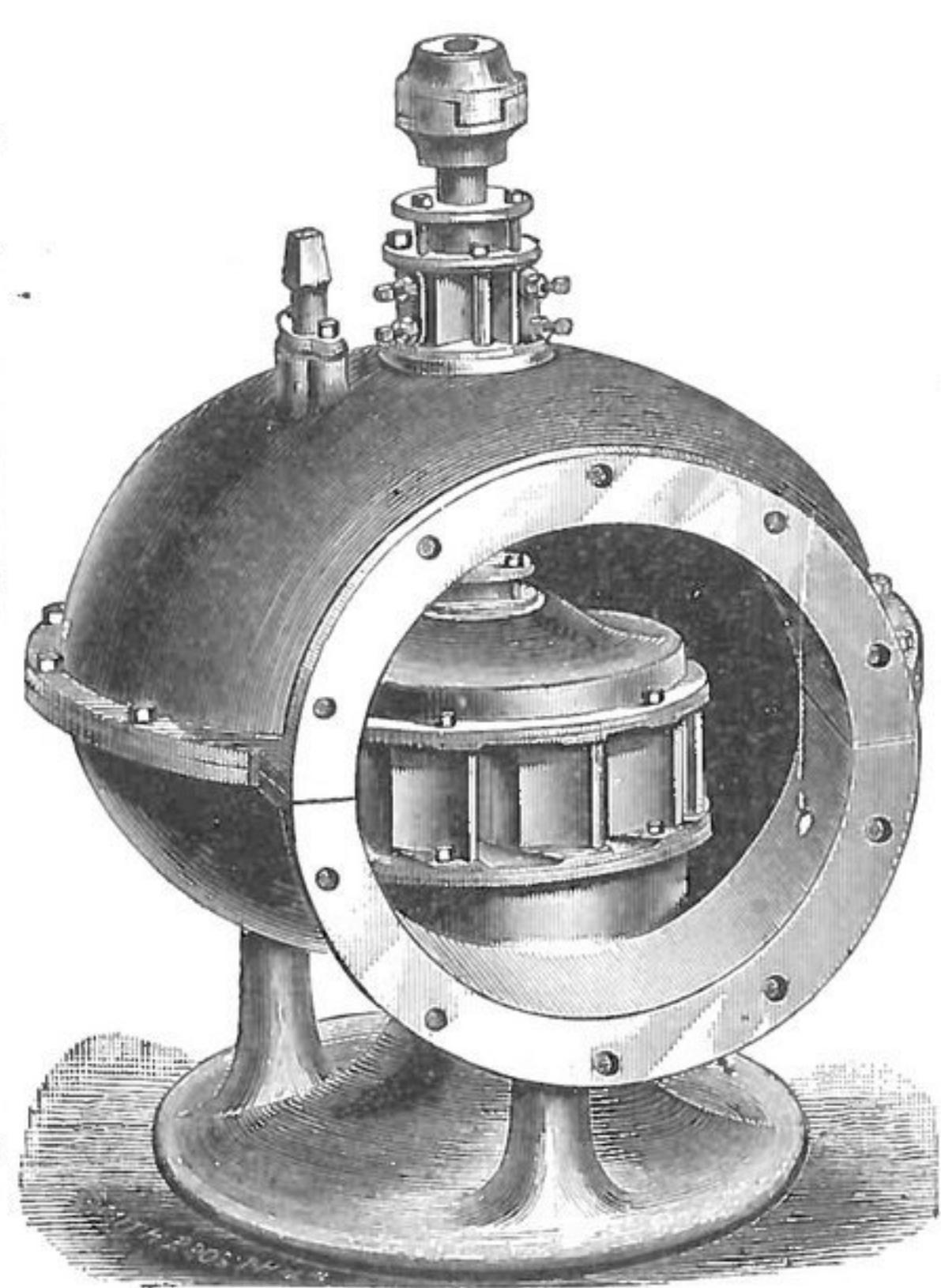
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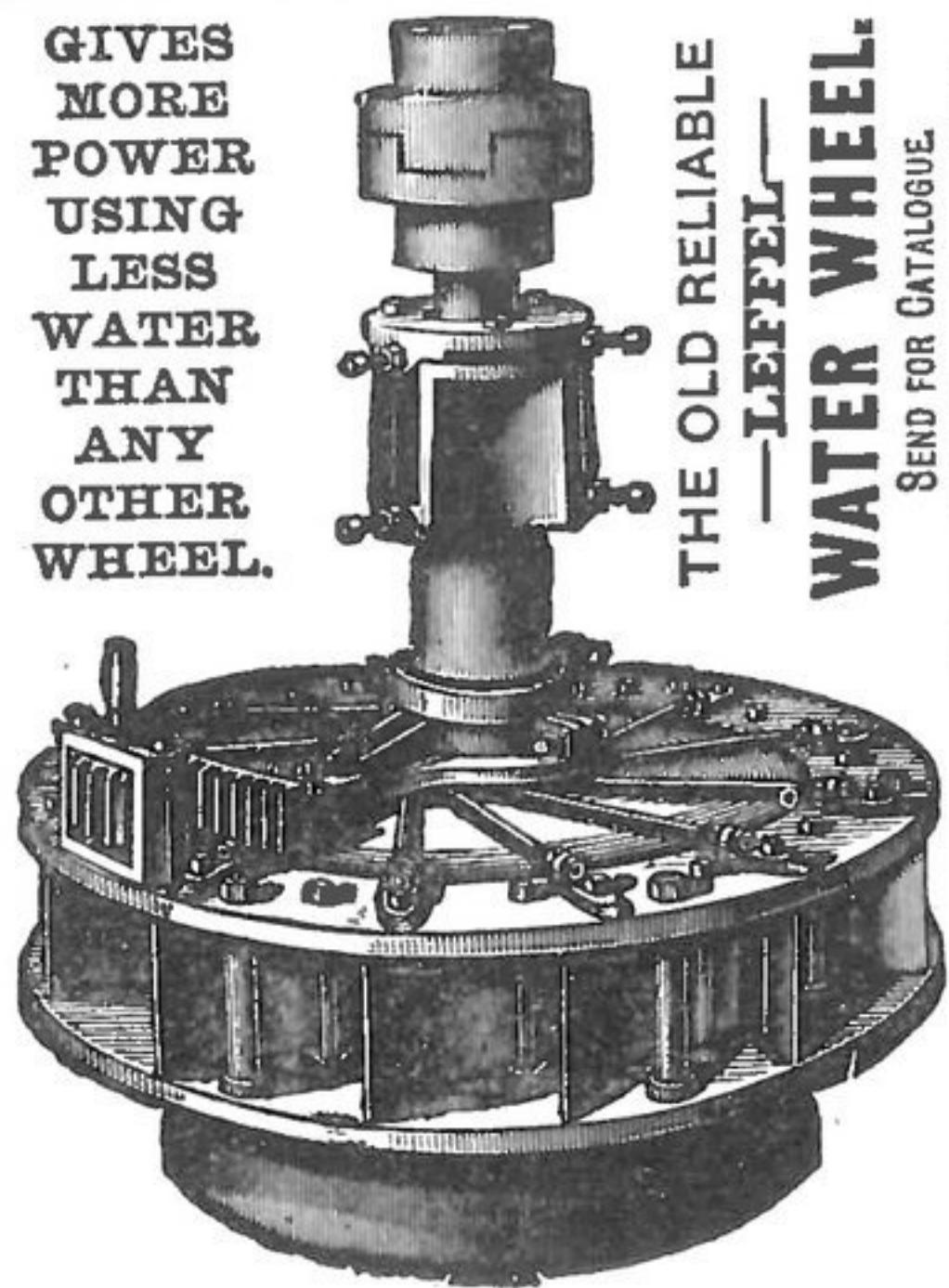


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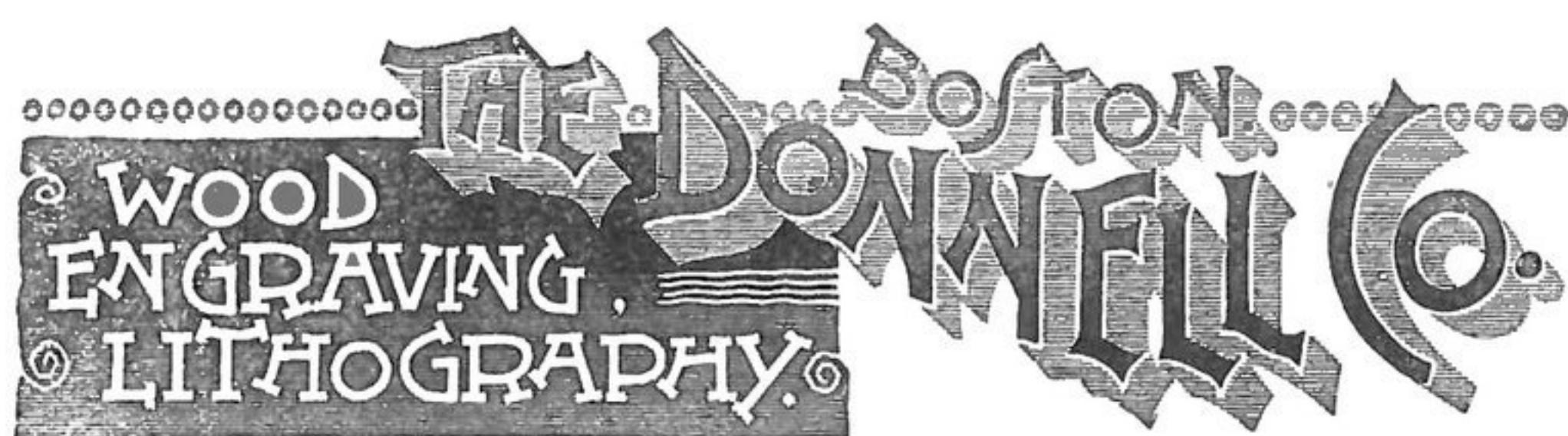
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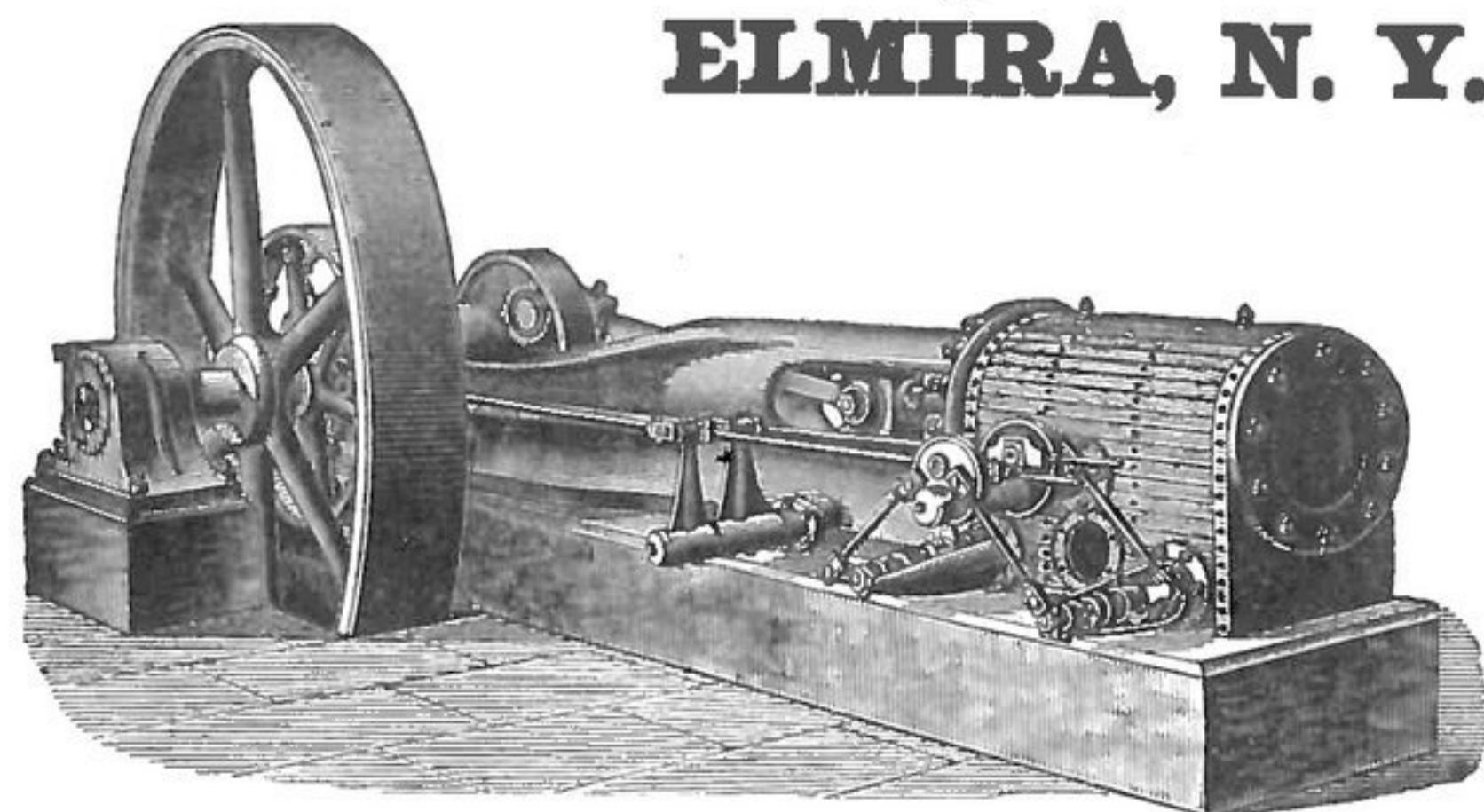
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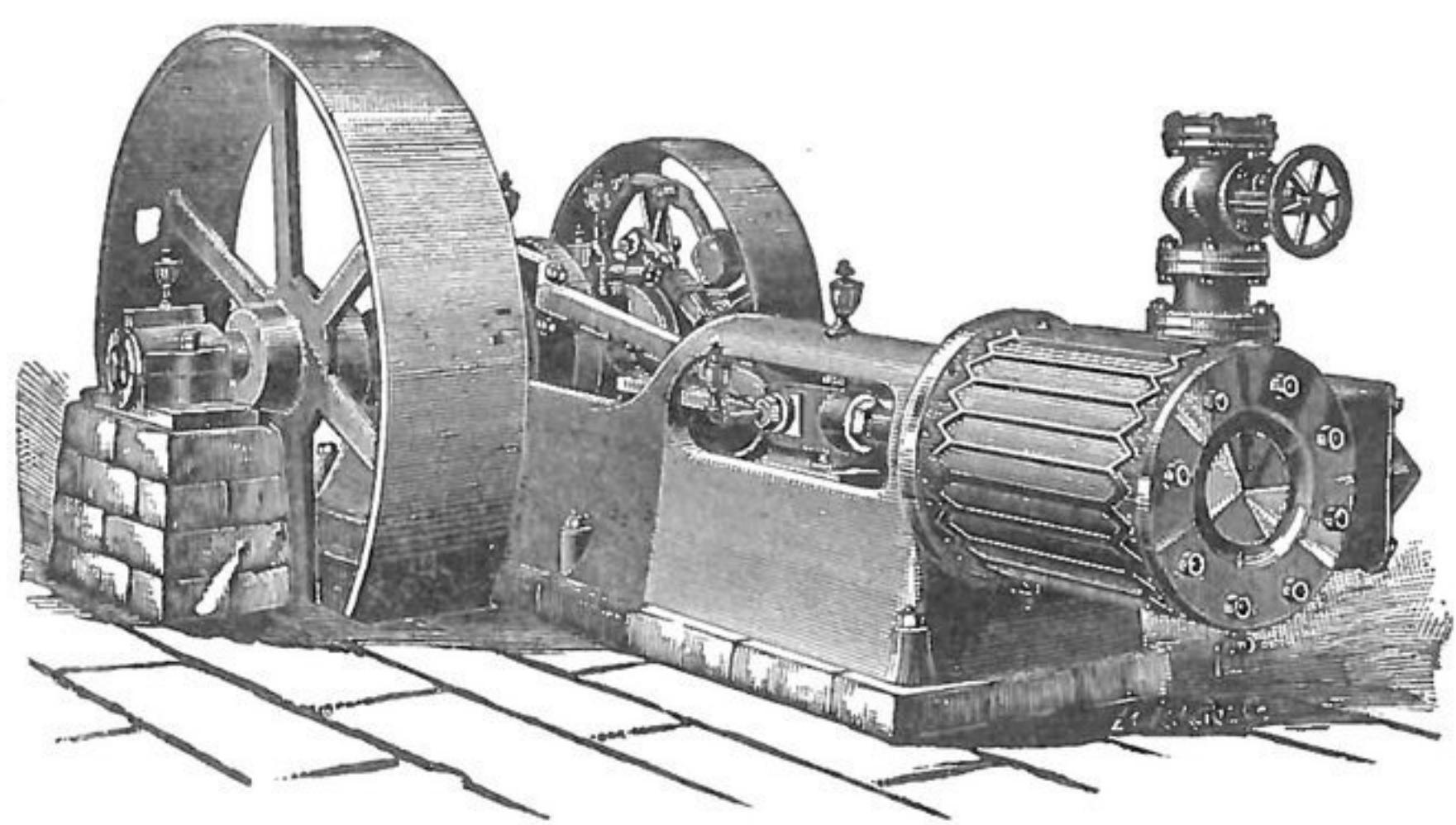
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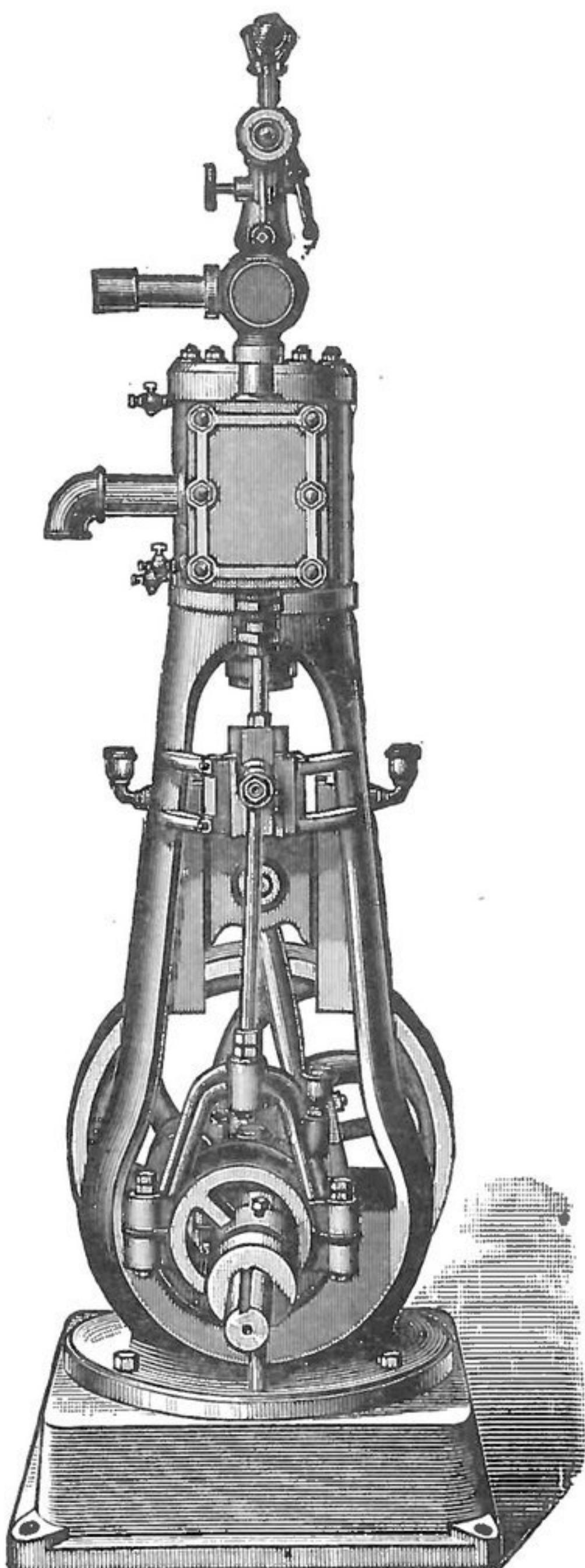
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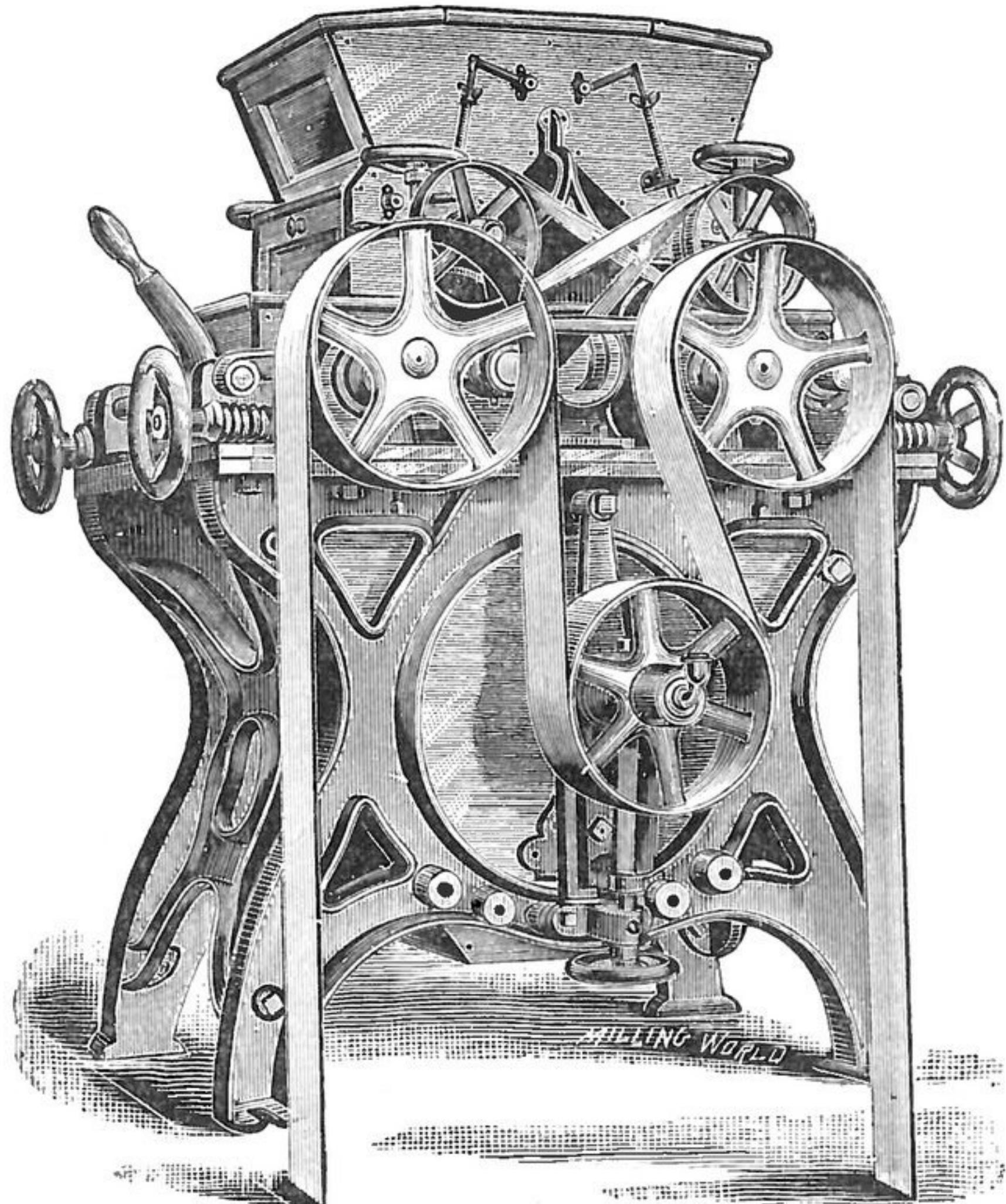
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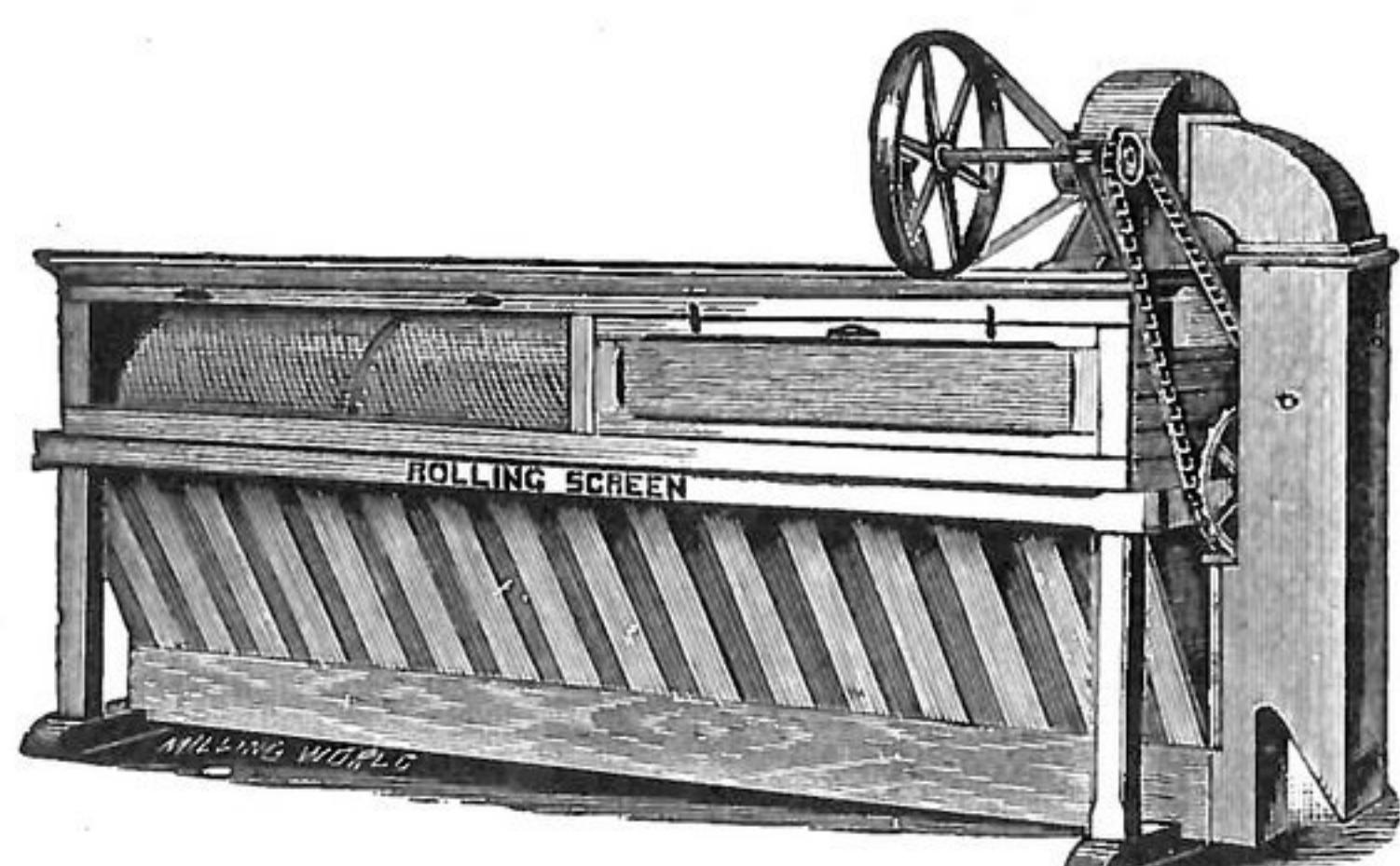
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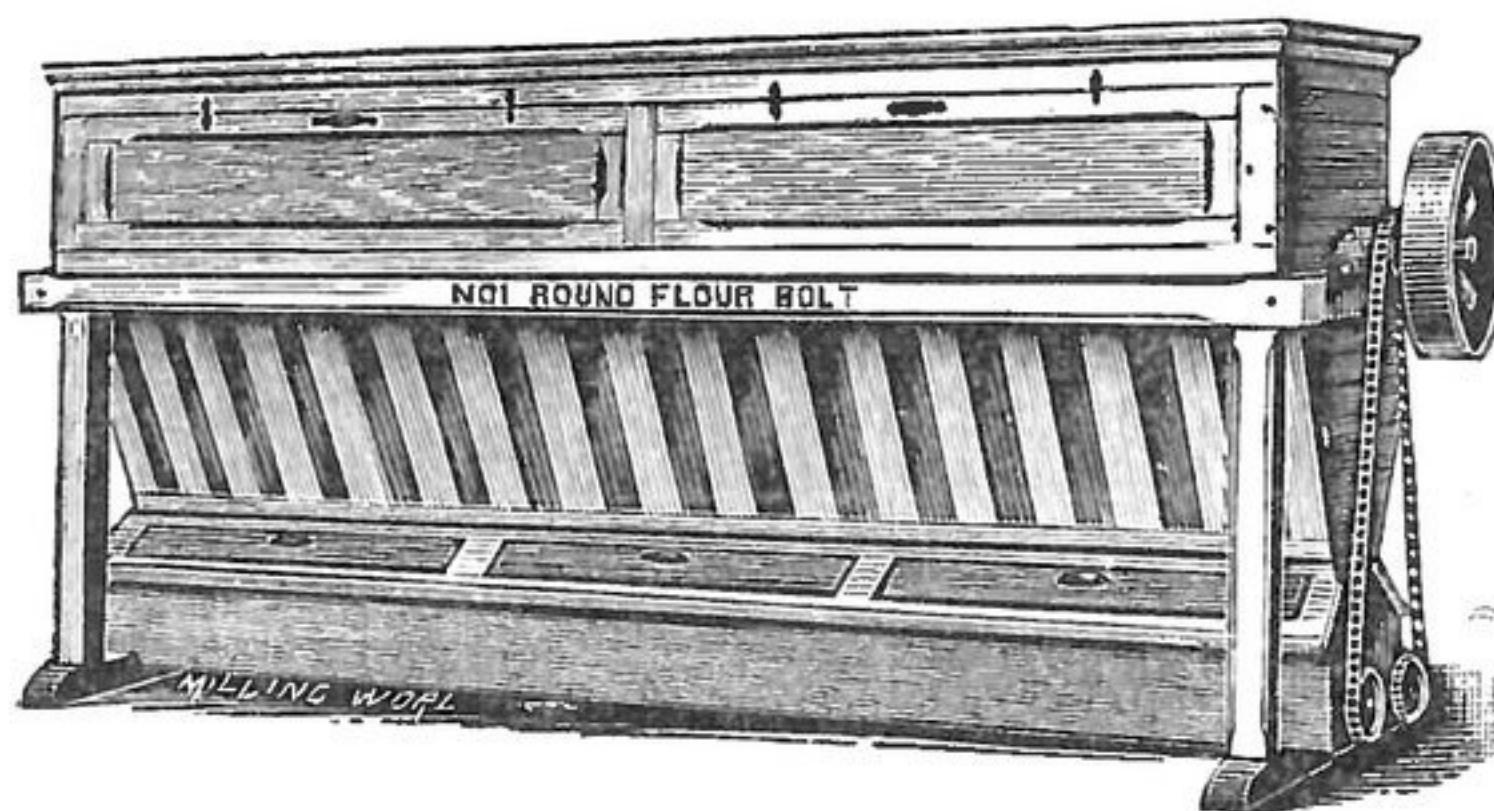
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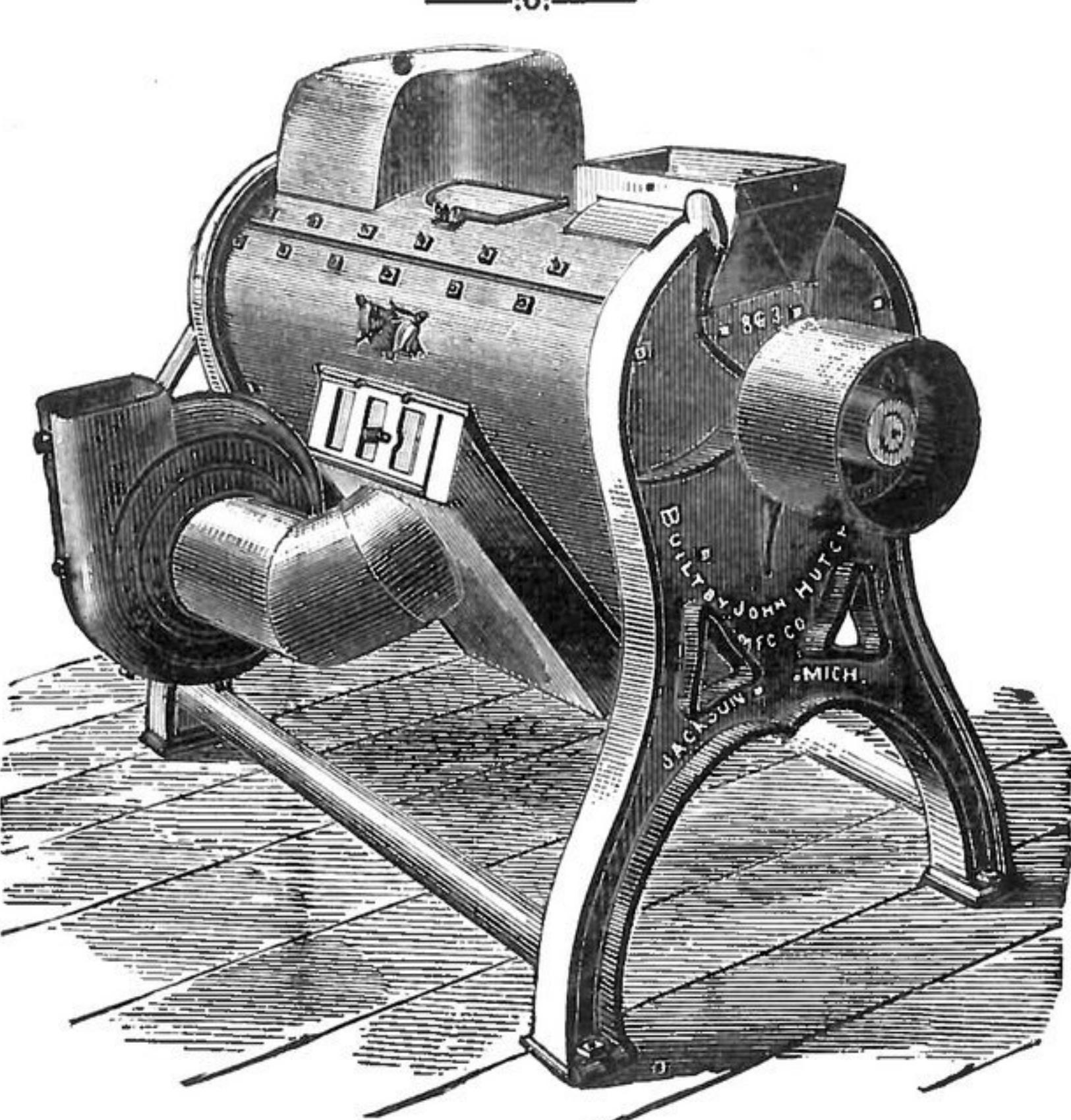


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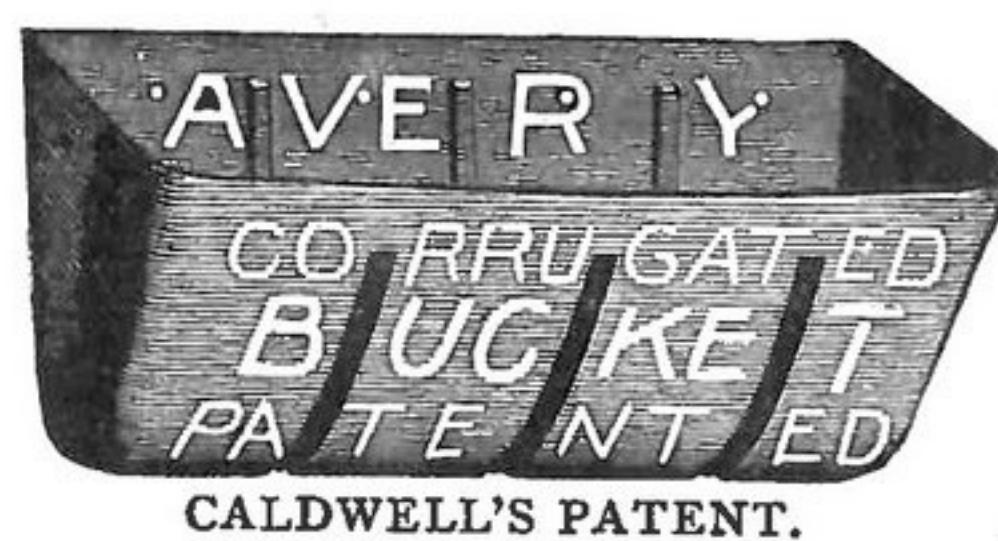
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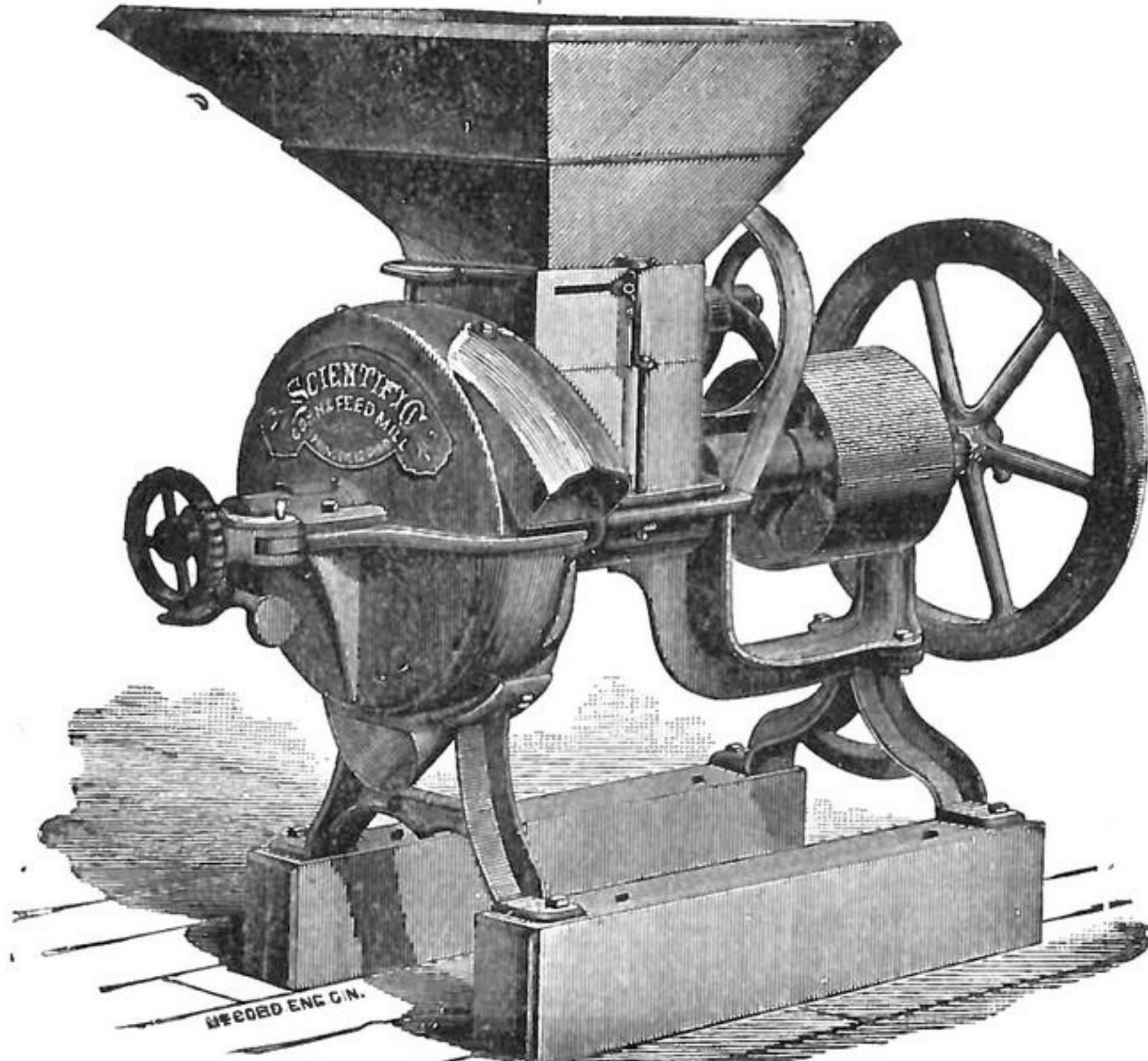
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